machine numbers | H25C46DT, H27C46DT, H32C46DT, H36C46DT
H25C47DT, H27C47DT, H32C47DT, H36C47DT • Presentation™ TVs

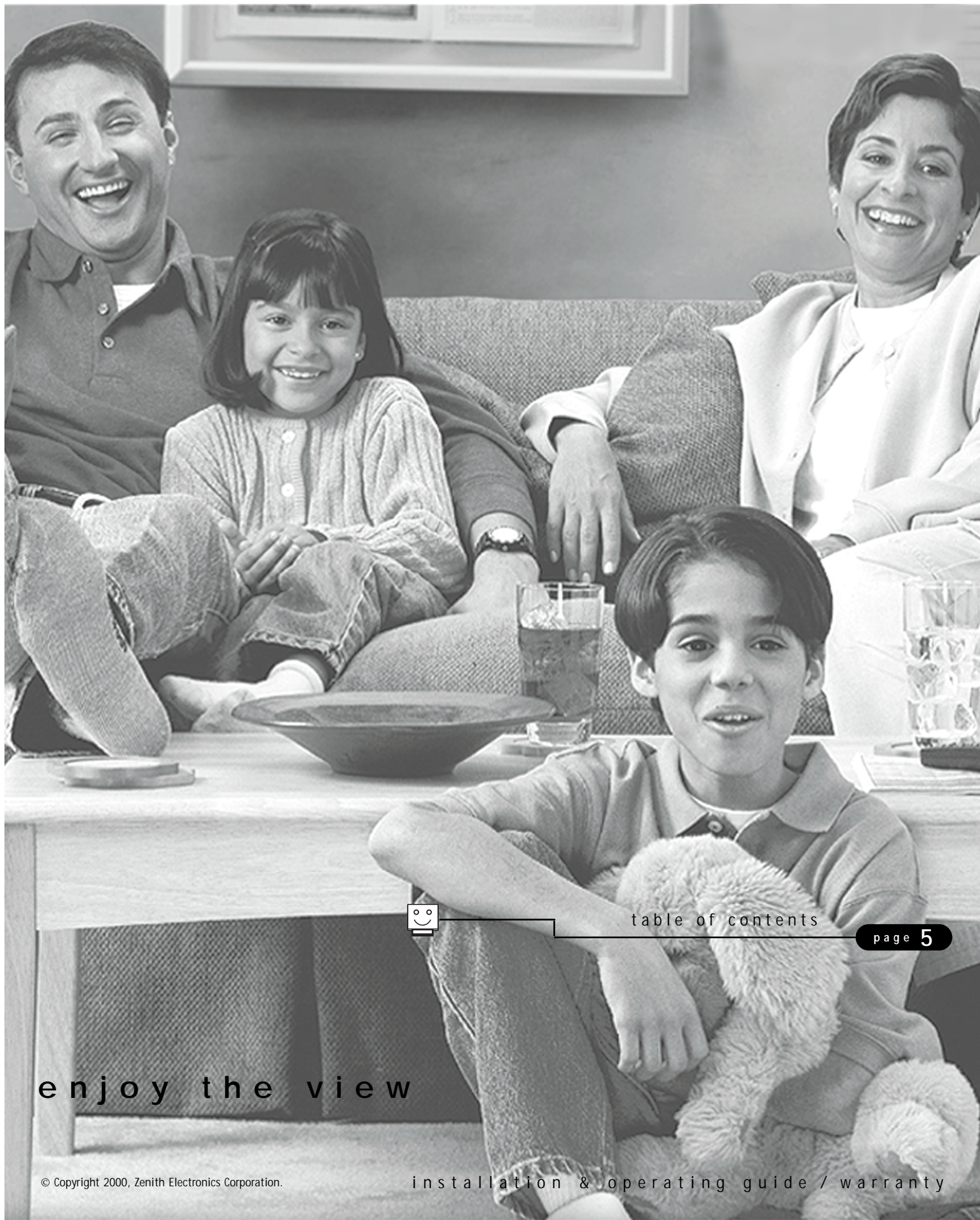zenith **Z**®

enjoy the view
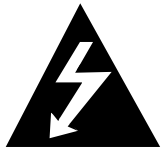
installation & operating guide / warranty

WARNING
RISK OF ELECTRIC SHOCK
DO NOT OPEN

WARNING:

TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER TO QUALIFIED SERVICE PERSONNEL.

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING:

TO PREVENT FIRE OR SHOCK HAZARDS, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

POWER CORD POLARIZATION:

This product is equipped with a 3-wire grounding-type alternating current line plug. This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the three-wire ground type plug.

NOTE TO CABLE/TV INSTALLER:

This reminder is provided to call the cable TV system installer's attention to Article 820-40 of the National Electric Code (U.S.A.). The code provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of the cable entry as practical.

REGULATORY INFORMATION:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

CAUTION:

Do not attempt to modify this product in any way without written authorization from Zenith Electronics Corporation. Unauthorized modification could void the user's authority to operate this product.

IMPORTANT SAFETY INSTRUCTIONS

Important safeguards for you and your new product

Your product has been manufactured and tested with your safety in mind. However, improper use can result in potential electrical shock or fire hazards. To avoid defeating the safeguards that have been built into your new product, please read and observe the following safety points when installing and using your new product, and save them for future reference.

Observing the simple precautions discussed in this operating guide can help you get many years of enjoyment and safe operation that are built into your new product.

This product complies with all applicable U.S. Federal safety requirements, and those of the Canadian Standards Association.

1. Read Instructions
All the safety and operating instructions should be read before the product is operated.

2. Follow Instructions
All operating and use instructions should be followed.

3. Retain Instructions
The safety and operating instructions should be retained for future reference.

4. Heed Warnings
All warnings on the product and in the operating instructions should be adhered to.

5. Cleaning
Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

6. Water and Moisture
Do not use this product near water for example, near a bath tub, wash bowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool.

7. Accessories
Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury to a child or adult, and serious damage to the product. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the product. Any mounting of the product should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.

8. Transporting Product
A product and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the product and cart combination to overturn.

PORTABLE CART WARNING

9. Attachments
Do not use attachments not recommended by the product manufacturer as they may cause hazards.

10. Ventilation
Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating, and these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.

11. Power Sources
This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company. For products intended to operate from battery power, or other sources, refer to the operating instructions.

12. Line-Cord Polarization
This product is equipped with a 3-wire grounding type alternating-current line plug. This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the three-wire ground-type plug.

13. Power-Cord Protection
Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the product.
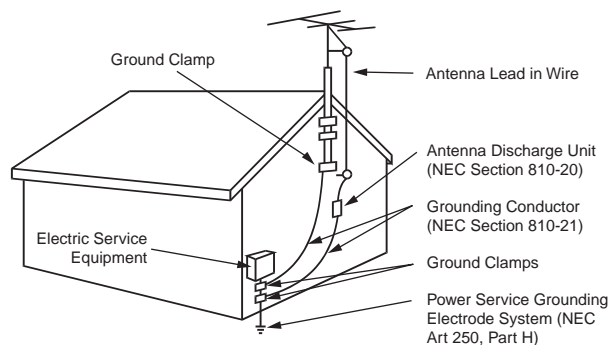
IMPORTANT SAFETY INSTRUCTIONS

(Continued from previous page)

14. Outdoor Antenna Grounding

If an outside antenna or cable system is connected to the product, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Article 810 of the National Electrical Code (U.S.A.), ANSI/ NFPA 70 provides information with regard to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.

Example of Grounding According to National Electrical Code Instructions

Ground Clamp

Antenna Lead in Wire

Antenna Discharge Unit (NEC Section 810-20)

Grounding Conductor (NEC Section 810-21)

Electric Service Equipment

Ground Clamps

Power Service Grounding Electrode System (NEC Art 250, Part H)

NEC - National Electrical Code

15. Lightning

For added protection for this product (receiver) during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the product due to lightning and power-line surges.

16. Power Lines

An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.

17. Overloading

Do not overload wall outlets and extension cords as this can result in a risk of fire or electric shock.

18. Object and Liquid Entry

Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.

19. Servicing

Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

20. Damage Requiring Service

Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:

 a. If the power-supply cord or plug is damaged.

 b. If liquid has been spilled, or objects have fallen into the product.

 c. If the product has been exposed to rain or water.

 d. If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.

 e. If the product has been dropped or the cabinet has been damaged.

 f. If the product exhibits a distinct change in performance.

21. Replacement Parts

When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.

22. Safety Check

Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.

23. Wall or Ceiling Mounting

The product should be mounted to a wall or ceiling only as recommended by the manufacturer.

24. Heat

The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.

This operating and installation guide is divided into three sections:
*6 thru 15, **Computer Section** - Setting up the PCZTV (Presentation TV) to be used as a computer monitor.*
*16 thru 45, **TV Section** - Setting up the TV's features.*
*46 thru 51, **Installer section** - A special section with information and instructions primarily used by qualified electronics servicer/technicians to configure or adjust the operational features of this TV.*

The Optional LT2000 Quickset II Clone Programmer
To preform the installation setup, you can use the MBR3447, and the optional LT2000 Quickset II Clone Programmer - - both are shown and described in the Installer's Section. The MBR3447 Installer Remote gives access to the Service menus, User menus, and has a Source key. The LT2000 Quickset II Clone Programmer is used to duplicate a TV's setup and install it on another identical Zenith TV. The Clone Programmer can be programmed to store in non-volatile memory up to three TV setups. See your Zenith Dealer.

Read the following overview/instructions to set up your PCZTV (Presentation TV) as a Computer Monitor

Using Your Presentation TV as a Computer Monitor (pages 7 - 14)

Connect your Computer to the TV using the cable provided in the accessory packet supplied with the TV, follow the hookup instructions on pages 8 and 9.

PC   You can make a direct hookup to the TV's front or rear computer connectors without using any adapters.

MAC Macintosh computers may require a Zenith PCZ40 adapter (typical DB-15 adapter which connects the Macintosh 2-row connector to the TV's 3-row connector) see your Zenith dealer or computer reseller.

Video Mirror Connections (Optional)
The computer image can be sent to both the TV screen and a computer monitor at the same time by using the video mirror connection, follow the instructions on page 9.

PC   Direct connection to the TV's connectors using the cable provided in the accessory packet.

MAC Macintosh computers may require a Zenith PCZ40 adapter (typical DB-15 adapter which connects the Macintosh 2-row connector to the TV's 3-row connector) see your Zenith dealer or computer reseller.

Adjust the Computer Display Output to TV Requirements

PC   Computer display output settings must be set to SVGA 800 x 600 @ 60 Hz.

MAC Macintosh display output settings must be set to SVGA 800 x 600 @ 60 Hz.

Set Up the Presentation TV for Computer Requirements

PC   If your Computer is hooked up to the TV's front computer port which is 800 x 600 @60 Hz, choose

FRONT VGA by pressing TV/VCR SOURCE repeatedly on the remote control.

If your Computer is hooked up to the TV's rear computer port, choose REAR SVGA by pressing TV/VCR SOURCE repeatedly on the remote control.

MAC If your Macintosh is hooked up to the TV's front computer port which is 800 x 600 @ 60Hz, choose FRONT SVGA by pressing TV/VCR SOURCE repeatedly on the remote control.

If your Macintosh is hooked up to the TV's rear computer port, choose REAR SVGA by pressing TV/VCR SOURCE repeatedly on the remote control.

Additional Computer Image Enhancements (Optional)
Additional computer output adjustments to optimize the computer image quality appearing on the TV screen

PC   See page 10 for Windows environment.

MAC See page 11 for Macintosh environment.

Troubleshooting
Problems? See troubleshooting on page 12 for PC computer/TV problems or page 13 for Macintosh computer/TV problems.

Notes
• Avoid using hookup cables of excessive length (longer than 25 feet). Long cables can adversely affect image quality and Computer/TV performance.
• Not all computer cables will work with the PCZTV. See your Zenith dealer for special PCZTV extension cables.

Note: The optional PCZ3000 Computer Scan Conversion Card Kit is available from your Zenith dealer which enhances the image from your computer and allows you to link or daisy-chain a series of TV sets; allows a computer's image to appear on a series of TVs connected to the PCZTV. See your Zenith dealer for further details.

Here is the basic setup to use the Presentation TV as a computer monitor

1 Make the basic connections as indicated. (Appearance of components may vary from those in the illustrations see page 13.)

2 Plug in your TV. Do not plug it into a switched outlet. Your Presentation TV is designed to operate on standard current, 120-volt 60 Hertz AC. Do not attempt to operate it on DC Current.
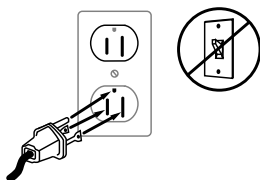
3 On the remote to choose the computer as the viewing source, press TV/VCR SOURCE repeatedly until "REAR COMPUTER SVGA" (Rear Computer in) is displayed, or "FRONT COMPUTER SVGA" (Front Computer in) is displayed.

4 Boot up your computer. As it warms up the TV will adapt to your computer.

Computer Video "Card" Output

TV front

Video Out to Computer Monitor

Back of Computer

video in L audio R

Computer Sound "Card" Output

"Video Mirror" Cable

TV back

COMPUTER IN

ANTENNA CABLE

S-VIDEO OUT   S-VIDEO IN   R- AUDIO- L

M.P.I.

VIDEO   AUX IN   R- AUDIO- L

R

AUDIO OUT   R- AUDIO- L

L   COMPUTER AUDIO

Connections to TV front or rear computer port, with computer sound card output to front or rear R - audio - L inputs.

Components may vary from those in the illustration. If you have a Macintosh, use the 2-row to 3-row DB15 adapter on the Macintosh video connector.

On some notebook models you must locate the "display toggle key" and switch the display to "external." Refer to the instructions for your computer.

You can also connect your computer to the Front input jacks panel; specify FRONT COMPUTER SVGA in the Source menu; press TV/VCR SOURCE repeatedly. Your computer's image output settings must be set to 800 x 600 @ 60Hz or SVGA before the computer picture can appear on the PCZTV screen.

An accessory packet is included with all models. A 15-ft. cable with a "video mirror" is featured for providing a computer image to two monitors—your computer's monitor and your Zenith TV.

1 Make the connections with the 15-ft. "video-mirror" cable as shown. Also refer to the preceding page for audio connections and "Using the monitor function."

TV back

video in L audio R

(800 x 600 @60 Hz)

ANTENNA CABLE

COMPUTER IN

S-VIDEO OUT   S-VIDEO IN   R- AUDIO- L

M.P.I.

R   VIDEO AUX IN R- AUDIO- L

AUDIO OUT

L   COMPUTER AUDIO   R- AUDIO- L

Back of computer

Actual appearance of components may vary

Cable for "video mirror"

Video cable from monitor
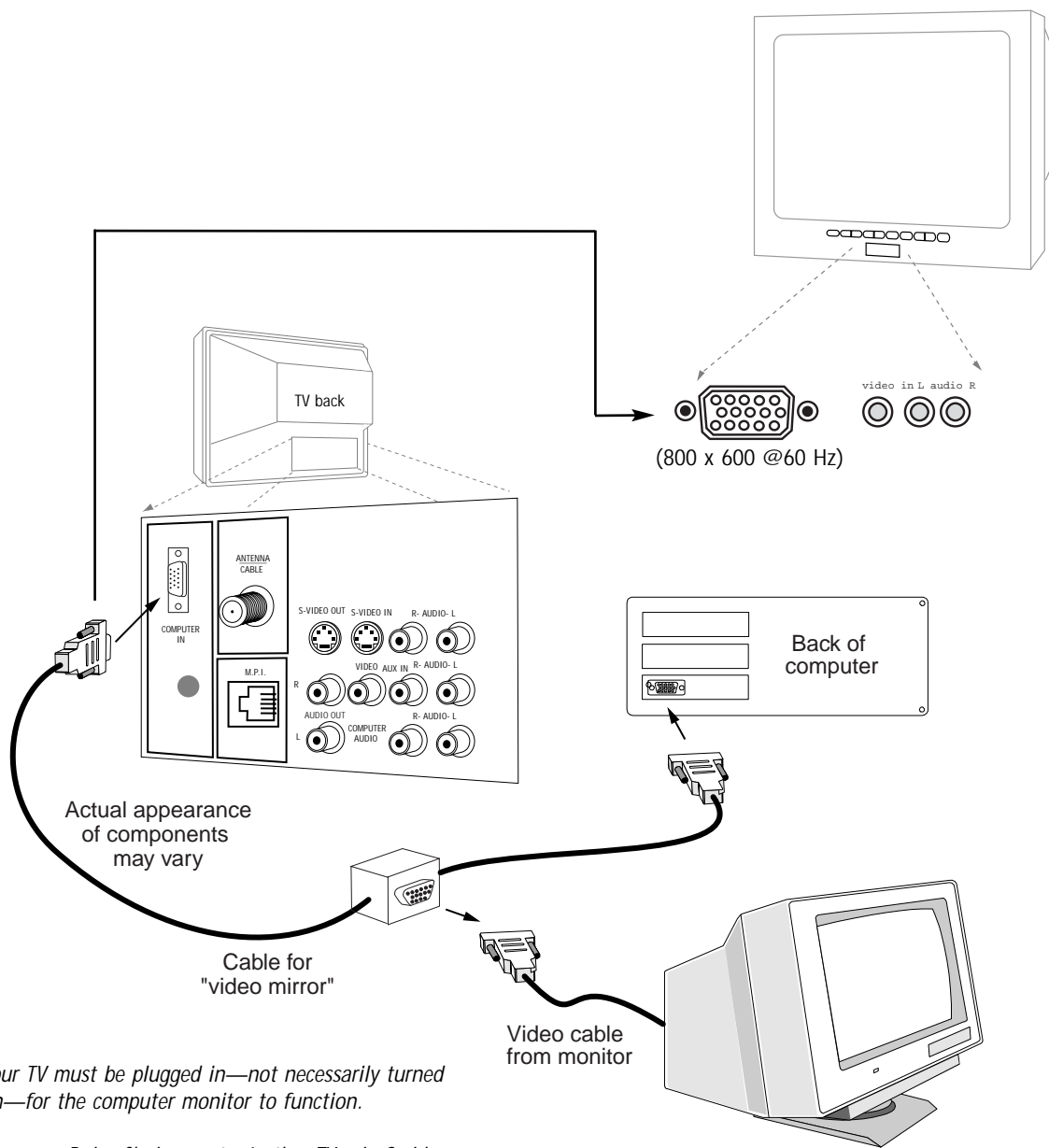
Computer monitor

Your TV must be plugged in—not necessarily turned on—for the computer monitor to function.

You can "Daisy Chain" up to 4 other TVs via S-video loop out and see the computer display on more TV sets (see page next page for details).

Optional PCZ3000 Scan Card S-Video/Video Loop-Out Setups

If you install the optional PCZ3000 Scan Conversion Card Kit into your 46 Series Presentation TV, you can "daisy-chain" the TV's S-Video or Video output to up to 4 other TVs: Send the computer image (and sound see page 22) to a "Master" TV and then to other TVs connected in a daisy-chain series

Notes

• *These setups require factory menu item 25 NTSC SCANCARD, default value "0" to be changed to "1". (See Installer/Service section for instructions regarding how to change factory menu item default values.)*

• *The cables shown in each of these setups are not supplied with the scan card or with the 46 Series, Presentation TVs. See your Zenith dealer to purchase the necessary cables or for further information.*

Setup for Looping-Out S-Video/Video Computer Image to a Master TV & other TVs

1. With the Computer and TV disconnected from power and the PCZ3000 Scan Conversion Card installed, make S-Video or Video connections as shown.
2. Connect Computer and TV(s) to power, first turn on the PCZTV, TVs, and then the Computer.
3. On the PCZTV, select TV source "REAR COMPUTER NTSC OUT" using the TV's Source menu.

```
            SOURCE

  REAR COMPUTER NTSC OUT

          PRESS:
     SOURCE TO CHANGE
     ENTER TO ACTIVATE
```
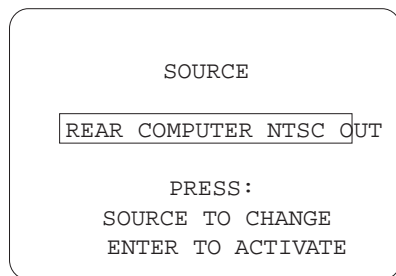
4. On the Computer, set display image to 800 x 600 @ 60Hz or SVGA.
5. On the Daisy-chain TVs, select the S-Video Input as the viewing source.
Viewing Sources Note: Be sure to follow instructions supplied with your computer, and TV(s) for selecting viewing sources. Computer image should appear on your Master and other TVs connected in series.

S-Video Loop-out from Master TV to other TVs
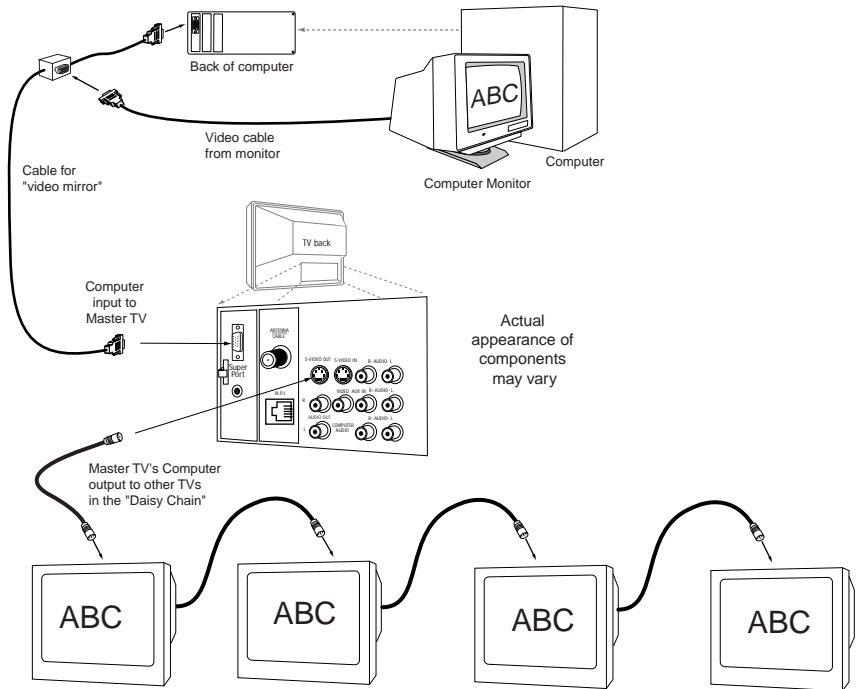
Video Loop-out from Master TV to other TVs

206-3602
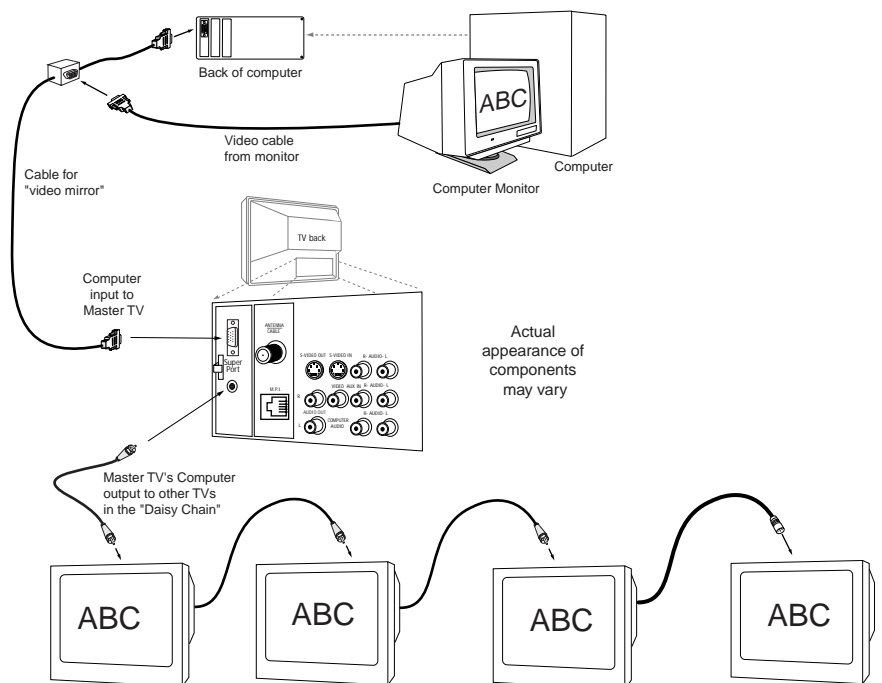
Setting your computer for optimum picture output in the Windows operating system environment

WINDOWS Environment

The following is a step-by-step procedure for setting your computer's picture output to optimum display quality.

1. Plug in your computer to the PCZTV (Presentation TV). Turn on the PCZTV and then the COMPUTER.

2. Open your CONTROL PANEL and click on DISPLAY PROPERTIES.

3. Click on APPEARANCE. This is where you will make changes for Presentation display.

At this time you will now CREATE a NEW SCHEME or display for Presentation Display. Once you have created this "new scheme" you'll be able to quickly switch between Normal and a Presentation display Scheme. Once you have made the changes to your computer Scheme, then SAVE AS a Classroom Display. Use the following steps to change each ITEM, FONT and COLOR for optimum computer image viewing on the TV screen.

1. Select under the ITEM and start with ACTIVE TITLE BAR.
* Select SIZE to 28
* Select COLOR to GREY
* Select FONT
* Select TIMES NEW ROMAN
* Select SIZE 18
* Select COLOR of BLACK

2. Select under the ITEM category CAPTION BUTTONS
* Select SIZE of 25

3. Select under the ITEM category ICON
* Select SIZE of 40
* Select FONT SIZE of 20
* Select FONT of TIMES NEW ROMAN (BOLD)
Technical Update: Optimum Display November 1998

4. Select under the ITEM category ICON SPACING (Horizontal)
* Select SIZE of 100

5. Select under the ITEM category ICON SPACING (Vertical)
* Select SIZE of 100

6. Select under the ITEM category INACTIVE TITLE BAR
* Select SIZE of 30
* Select FONT SIZE of 18
* Select FONT of TIMES NEW ROMAN

7. Select under the ITEM category MENU
* Select SIZE of 30
* Select FONT SIZE 18
* Select FONT of TIMES NEW ROMAN

8. Select under the ITEM category MESSAGE BOX
* Select FONT SIZE of 14
* Select FONT of TIMES NEW ROMAN

9. Select under the ITEM category PALETTE TITLE
* Select SIZE of 30
* Select FONT SIZE of 18
* Select FONT of TIMES NEW ROMAN

10. Select under the ITEM category SELECTED ITEMS
* Select SIZE of 30
* Select COLOR of BLUE
* Select FONT SIZE of 18
* Select FONT of TIMES NEW ROMAN

11. Rename the scheme and SAVE AS, PRESENTATION DISPLAY.

12. CHANGING THE APPLICATION ICON SIZE
* Select Excel (Spreadsheet/workbooks)
* From the TASK BAR select TOOLS
* Select CUSTOMIZE
* Select OPTIONS
* Click on LARGE ICONS

Your Icons within your WORD and EXCEL will now match your new Scheme display.
Now you have set your Windows computer for optimum Presentation Display.

Setting your computer for optimum picture output in the Macintosh operating system environment

MACINTOSH Environment

The following is a step-by-step procedure for setting your computer picture output to optimum display quality.

1. Plug in your computer to the PCZTV (Presentation TV). Turn on the PCZTV and then the COMPUTER.

2. Open your CONTROL PANEL by choosing under the APPLE icon or by clicking on your HARD DRIVE icon. If you choose the HARD DRIVE icon, you'll have to open your CONTROL PANEL through the SYSTEMS FOLDER.

3. Once you have located the CONTROL PANEL, click on VIEWS. This is where you will make changes for Presentation display.

4. Change the FONT to one that is appears well on a television. We would suggest that you use TIMES BOLD. Now, change the FONT SIZE to 18 or better.

Each time that you use the PCZTV with your computer, you will simply change the FONT and SIZE through the CONTROL PANEL and VIEW. You have now changed the appearance of all your folders but NOT your applications.

VIEWING FOR PRESENTATION Vs. PRIVATE

1. When viewing an application, such as EXCEL or WORD, you will have to change the appearance of each application.

2. Once the application has been opened, just change the view from 100 percent to a selection over 150 percent. This will not permanently effect your document. Once you have completed your presentation, simply reduce the size back down to 100 percent viewing ratio.

3. To enlarge the ICONS of the application, click on VIEW and then select TOOLBARS. Slide down and highlight CUSTOMIZE with your mouse, then click.

4. A file folder will now "pop-up". Now selection OPTIONS and then click on LARGE ICONS. This will only enlarge the ICONS on your menu palette. Due to a less flexible platform, you will not be able to effect the fonts/size on the Menu Bar.

Our PCZTV is a high quality, low cost alternative to a true SVGA monitor.

Some quick and easy tips to resolving problems using the Presentation TV as a Computer Monitor

Symptoms	Possible Cause(s)	Possible Solution(s)
Computer Image		
Poor or no computer picture.	• Poor Connections. • Card not fully inserted. • TV/Computer not turned on. • Wrong TV source selected. • 800 x 600 @60 HZ not set. • Cable over 25 feet.	-Check all cable connections. -Be sure green light appears on PCZ3000 scan card. -Turn TV/Computer on. -Select the proper TV source the computer is connected to. -On the Computer, set display output to 800 x 600 @60 Hz. -Set up Computer/TV where an excessively long cable is not needed.
Local interference.	• Check for disturbing source. • Appliance too close to TV. or computer.	*The following may cause image problems or distortion:* *Electrical appliances, powerful lights, cars, trucks; computers or* *portable phones; medical equipment* -If possible increase the distance between your TV and computer and the offending appliance. Or shut one of them off.
Fuzzy computer picture.	• 800 x 600 @60 HZ not set.	-On the computer, set display output to 800 x 600 @60 Hz.
Poor computer picture.	• Computer display output is not optimized.	-See pages 10 or 11 for instructions to optimize computer's image.

Daisy-Chain TVs have
no picture.
	• S-Video cables not
	  connected between source TV
	  and daisy-chained TVs.
	• S-Video not selected
	  on other daisy-chain TVs.
	• Rear Computer NTSC Out,
	  not selected for viewing on
	  source TV in daisy-chain series.
		-Connect cables properly.
		
		-Select S-Video input as the source on daisy-chained TVs.
		
		-Select "Rear Computer NTSC Out" on source TV in daisy-chain.

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Some quick and easy tips to resolving problems using the TV as a Computer Monitor

Symptoms	Possible Cause(s)	Possible Solution(s)	See page(s)
Computer Image			
Poor or no computer picture.	• Poor Connections. • Card not fully inserted. • TV/Computer not turned on. • Wrong TV source selected. • 800 x 600 @60 Hz not set. • Cable over 25 feet.	-Check all cable connections. -Be sure green light appears on PCZ300 scan card. -Turn TV/Computer on. -Select the TV source the computer is connected to. -On the Computer, set display output to 800 x 600 @60 Hz. -Set up Computer/TV where an excessively long cable is not needed.	
Local interference.	• Check for disturbing source. • Appliance too close to TV. or computer.	*The following may cause image problems or distortion:* *Electrical appliances, powerful lights, cars, trucks; computers or* *portable phones; medical equipment* -If possible increase the distance between your TV and computer and the offending appliance. Or shut one of them off.	
Fuzzy computer picture.	• 800 x 600 @60 Hz not set.	-On the computer, set display output to 800 x 600 @60 Hz.	
Poor computer picture.	• Computer display output is not optimized.	-See pages 10 or 11 for instructions to optimize computer's image.	
Daisy-Chain TVs have no picture.	• S-Video cables not connected between source TV and daisy-chained TVs. • S-Video not selected on other daisy-chain TVs. • Rear Computer NTSC Out, not selected for viewing on source TV in daisy-chain series.	-Connect cables properly. -Select S-Video input as the source on daisy-chained TVs. -Select "Rear Computer NTSC Out" on source TV in daisy-chain.	

⚠ **Note: The information on pages 14 and 15 only apply to TVs equipped with the optional PCZ3000 Scan Conversion Card technology!**

Adjust the screen options while in Computer Mode.

While your Presentation TV is in Rear Computer Mode, the table below lists the commands used to make adjustments to the screen.

The following remote keys apply ONLY to the NUMBER keypad.

Remote Key	Normal Mode	Menu Mode	Zoom Mode
1*	Enter Zoom Mode	N/A	†† Increase Zoom or Cancel Zoom Mode
2	N/A	N/A	Pan Up
3	Compress On/Off	N/A	Compress On/Off
4	N/A	Menu Adjust Down	Pan Left
5	Enter Menu Mode	Cancel Menu Model	Enter Menu Mode
6	N/A	Menu Adjust Up	Pan Right
7	†Auto Screen Size	N/A	N/A
8	N/A	Menu Select/Next	Pan Down
9	N/A	N/A	N/A
0	Freeze/Thaw	N/A	Freeze/Thaw

† Auto Size will adjust the computer image to match the TV Screen. Use a full-screen computer display with high average brightness for best results.

* The image cannot be zoomed in Freeze Mode.

†† If Zoom Mode is enabled it will cycle through:
1:1, 2:1, 3:1, 4:1, then back to 1:1 etc.

Remote Key Command Functions

Note: The following only applies to those TVs equipped with the optional PCZ3000 Scan Conversion Card technology. The table below illustrates the menu structure for the Presentation TV while in Computer mode. As with the Remote Key Command Functions, menus are operated through the NUMBER keypad. Generally speaking, keys 4 and 6 adjust menu options, key 8 cycles through menus and key 5 cancels all operations no matter what menu you are adjusting. Although menus are available in the Advanced mode, adjustments in this mode should only be made by a qualified electronics/service technician.

A

C

```
Menu Adjust:
H. Soften    Off
        Adjust    6 ▶
            8
5
```

```
Menu Adjust:
H. Soften    On
◀ 4    Adjust
            8
5
```

```
Menu Adjust:
Advanced . . .
        Adjust    6 ▶
            8
5
```

```
Menu Advanced:
SW 18 HW   6, 5
        Adjust
            8
5
```

```
Menu Adjust:
Zoom Cont: Remote
        Adjust    6 ▶
            8
5
```

```
Menu Adjust:
Zoom Cont. Menu
◀ 4    Adjust
            8
5
```

```
Menu Advanced:
Total Lines   628
        Adjust
            8
5
```

```
Menu Adjust:
Zoom Level 2
    Adjust    6 ▶
        8
5
```

```
Menu Adjust:
Zoom Level 3
◀ 4    Adjust    6 ▶
            8
5
```

```
Menu Adjust:
Zoom Level 4
◀ 4    Adjust
            8
5
```

```
Menu Advanced:
Vert. Freq 60
        Adjust
            8
5
```

```
Menu Adjust:
Screen Size . . .
    Adjust    6 ▶
        8
5
```

```
Menu Size:
Out H-Center  77
◀ 4    Adjust    6 ▶
            8
5
```

```
Menu Advanced:
Sense       2
◀ 4    Adjust    6 ▶
            8
5
```

```
Menu Size:
Out H-Width  99
◀ 4    Adjust    6 ▶
            8
5
```

```
Menu Advanced:
CR Character  13
        Adjust    6 ▶
            8
5
```

```
Menu Advanced:
CR character  130
◀ 4    Adjust
            8
5
```

```
Menu Size:
Out V-Center  340
◀ 4    Adjust    6 ▶
            8
5
```

```
Menu Advanced:
Clock width     2
◀ 4    Adjust    6 ▶
            8
5
```

```
Menu Size:
Out V-Height: 600
◀ 4    Adjust
            8
5
```

```
Menu  Advanced:
Clock Width B: 2
◀ 4    Adjust    6 ▶
            8
5
```

```
Menu Size:
Store OK
        Adjust    6 ▶
            8
5
```

```
Menu  Advanced:
Store Settings 0
◀ 4    Adjust    6 ▶
            8
5
```

B

```
Menu  Advanced:
Eng Reset      Off
◀ 4    Adjust    6 ▶
            8
5
```

```
Menu Adjust:
Manual Set . . .
        Adjust    6 ▶
            8
5
```

```
Menu Manual Set:
VGA Left:   0
        Adjust    6 ▶
            8
5
```

A

```
Menu Manual Set:
VGA Bot/4:        157
◀ 4    Adjust    6 ▶
            8
5
```

C

```
Menu Manual Set:
VGA Width:        80
◀ 4    Adjust    6 ▶
            8
5
```

⬇ 5 Pressing this key will exit all Scan Card Menus.

```
Menu Manual Set:
VGA Top/4:   5
◀ 4    Adjust    6 ▶
            8
5
```

```
Menu Manual Set:
VGA Store    0
        Adjust    6 ▶
            8
5
```

B

To hook up a computer see pages 6 - 15. To hook up other equipment, see below.

IMPORTANT!!

Use this page to decide where you need to begin your set up. First, find the line below that best describes what you want to do, then go to that page number.

Antenna only

If you are using an antenna and no other equipment, go to . . . . page 17
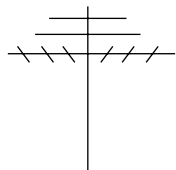
Cable only

If you have cable and no other equipment, go to . . . . page 18
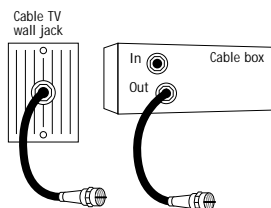
Antenna with VCR

If you are using an antenna and have a VCR, go to . . . . page 19
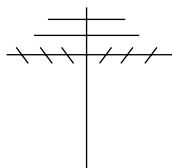
Cable and VCR

If you have cable and a VCR, go to . . . . page 20
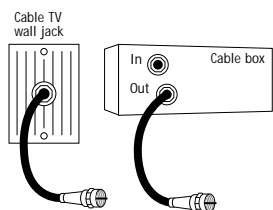
S-VHS VCR/Amplifier

If you want to connect an S-VHS VCR . . . . page 21
External Audio Amplifier with speakers . . . . page 22

206-3492-A

Connect an off-air antenna to the Presentation TV

1 Locate the Antenna/Cable jack on the back of the Presentation TV.

2 Connect the cable that runs from the wall directly to this jack, according to the diagram to the right.

3 Remove the back of the remote and put in two AAA batteries.

back of remote
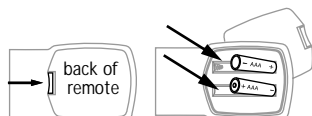
4 Plug in your TV. Do not plug it into a switched outlet. Your Entertainment Machine is designed to operate on standard current, 120-volt 60 Hertz AC. Do not attempt to operate it on DC Current.
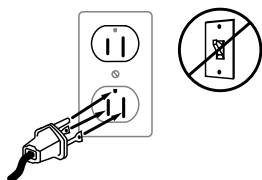
5 Go to page 23 to Auto Program your Presentation TV.

:) *If you have a 75 ohm RF cable, then you don't need any adapters!*

:(*A 300 to 75 ohm adapter is not included with the Zenith Presentation TV.*

Antenna

Flat wire (300 ohm)

300/75 ohm Adapter

TV back

COMPUTER IN

ANTENNA CABLE

S-VIDEO OUT S-VIDEO IN R- AUDIO- L

M.P.I.

VIDEO AUX IN R- AUDIO- L

R

AUDIO OUT

L   COMPUTER AUDIO

R- AUDIO- L

Antenna

RF coaxial wire (75 ohm)

TV back

COMPUTER IN

ANTENNA CABLE

S-VIDEO OUT S-VIDEO IN R- AUDIO- L

M.P.I.

R

VIDEO AUX IN R- AUDIO- L

AUDIO OUT

L   COMPUTER AUDIO

R- AUDIO- L

Mini glossary

75 OHM RF CABLE — The wire that comes from an off-air antenna or cable service provider. Each end looks like a hex shaped nut with a wire sticking through the middle, and it screws onto the threaded jack on the back of your TV.

300 TO 75 OHM ADAPTER — A small device that connects a two-wire 300 ohm antenna to a 75 ohm RF jack. They are usually about an inch long with two screws on one end and a round opening with a wire sticking out on the other end.

Hook Up Your Cable (CATV) to the TV

Connect cable service to the Presentation TV

1 Locate the Antenna/Cable jack on the back of the Presentation TV.

2 Connect the cable that runs from the wall directly to this jack, according to the diagram to the right.

3 Remove the back of the remote and put in two AAA batteries.

back of remote
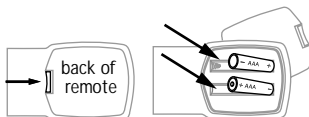
4 Plug in the TV. Do not plug it into a switched outlet. Your Presentation TV is designed to operate on standard current, 120-volt 60 Hertz AC. Do not attempt to operate it on DC Current.
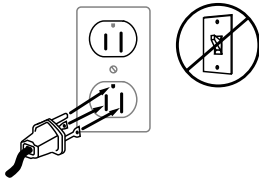
5 Go to page 23 to Auto Program the Presentation TV.

If you're using a cable box, leave the TV on channel 3 or 4 and use your cable box to change channels.

If you're using a cable box, Auto Program might only find the channel your cable service is on (usually channel 3 or 4). Don't worry, that's all you need!

Cable TV wall jack

TV back

Round wire (75 ohm)

ANTENNA CABLE

COMPUTER IN

S-VIDEO OUT S-VIDEO IN R- AUDIO- L

M.P.I.

R VIDEO AUX IN R- AUDIO- L

AUDIO OUT R- AUDIO- L

L COMPUTER AUDIO

Cable TV wall jack

In Cable box

Out output switch 3 4

TV back

RF coaxial wire (75 ohm)

ANTENNA CABLE

COMPUTER IN

S-VIDEO OUT S-VIDEO IN R- AUDIO- L

M.P.I.

R VIDEO AUX IN R- AUDIO- L

AUDIO OUT R- AUDIO- L

L COMPUTER AUDIO

206-3602

Connect your off-air antenna and VCR to the Presentation TV

Antenna

Flat wire
(300 ohm)

VCR back

VCR back AV panel

300/75 ohm
Adapter

In   output
switch 3 4

Out Video Audio

1 Locate the Antenna/Cable jack on the back of the VCR.

2 Connect the cable that runs from the antenna directly to this jack, according to the diagram to the right.

TV back

3 Remove the back of the remote and put in two AAA batteries.

back of
remote

AAA
AAA

ANTENNA
CABLE

A/V cables
*not included
with TV*

COMPUTER
IN

S-VIDEO OUT S-VIDEO IN R- AUDIO- L

M.P.I.

VIDEO AUX IN R- AUDIO- L

R

AUDIO OUT   R- AUDIO- L

L   COMPUTER
AUDIO

4 Plug in the TV. Do not plug it into a switched outlet. The Presentation TV is designed to operate on standard current, 120-volt 60 Hertz AC. Do not attempt to operate it on DC Current.
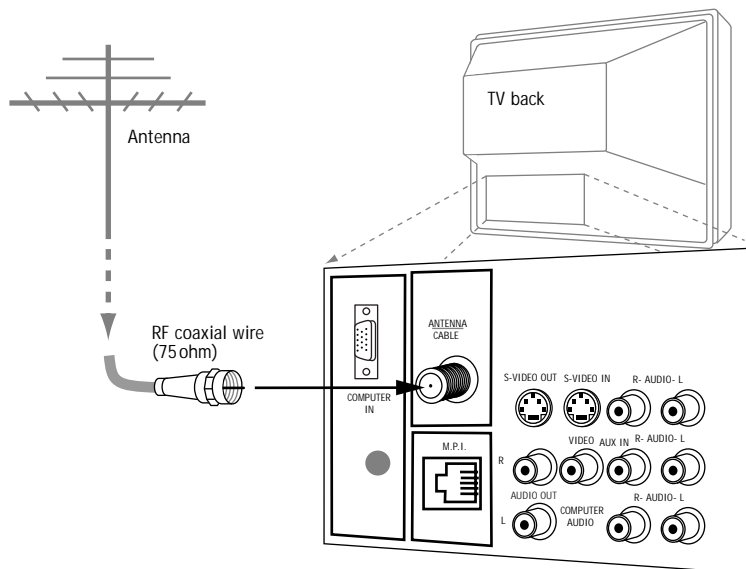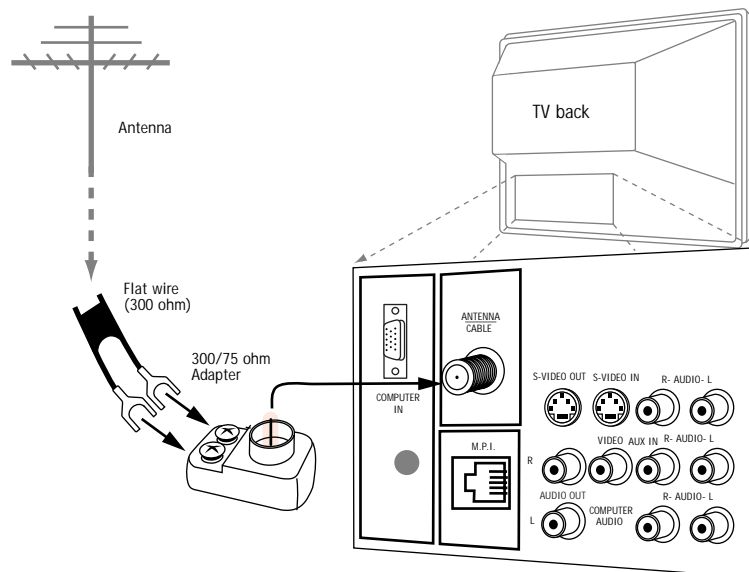
Antenna
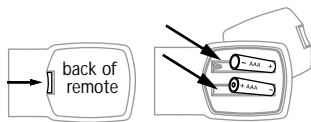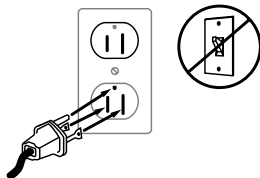
5 Go to page 23 to Auto Program the Presentation TV.

☹ *No A/V cables are included with the Zenith Presentation TV.*

RF coaxial wire
(75 ohm)

VCR back

VCR back AV panel

In   output
switch 3 4

Out Video Audio

☹ *Without A/V cables, most VCRs will not play videocassettes in stereo sound.*

TV back

ANTENNA
CABLE

A/V cables
*not included
with TV*

S-VIDEO OUT S-VIDEO IN R- AUDIO- L

COMPUTER
IN

M.P.I.

VIDEO AUX IN R- AUDIO- L

R

AUDIO OUT   R- AUDIO- L

L   COMPUTER
AUDIO

Cable TV
wall jack

VCR back

Connect a VCR and Cable service to the Presentation TV

VCR back AV panel

Round wire (75 ohm)

In   output
      switch 3 4

Out Video Audio

1 Locate the Antenna/Cable jack on the back of the VCR.

RF coaxial wire
(75 ohm)
*not included
with TV*

TV back

2 Connect the cable that runs from the wall directly to this jack, according to the diagram to the right.

3 Remove the back of the remote and put in two AAA batteries.

ANTENNA
CABLE

A/V cables
*not included
with TV*

back of
remote

COMPUTER
IN

S-VIDEO OUT S-VIDEO IN R- AUDIO- L

M.P.I.

VIDEO AUX IN R- AUDIO- L

R

AUDIO OUT   R- AUDIO- L

4 Plug in the TV. Do not plug it into a switched outlet. The Presentation TV is designed to operate on standard current, 120-volt 60 Hertz AC. Do not attempt to operate it on DC Current.
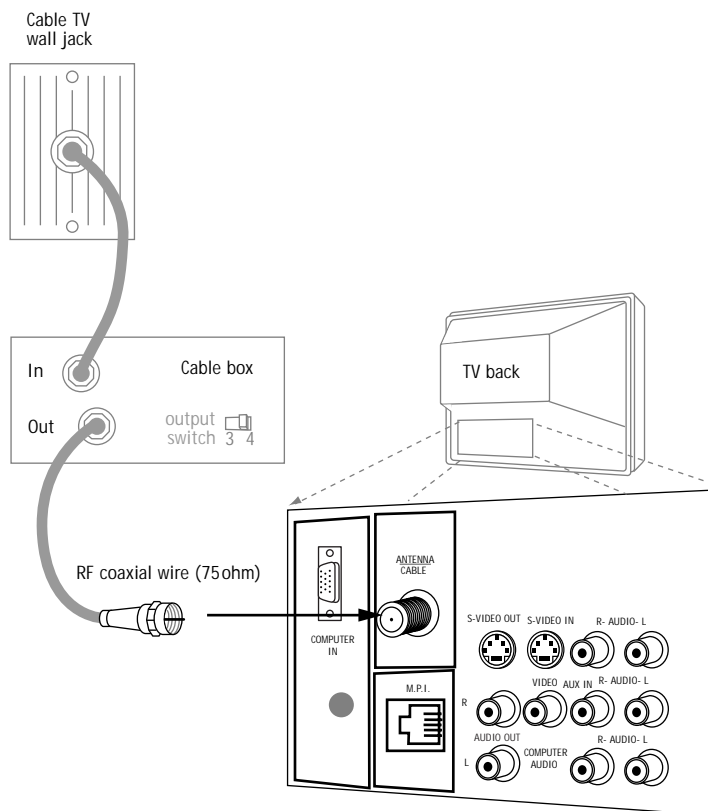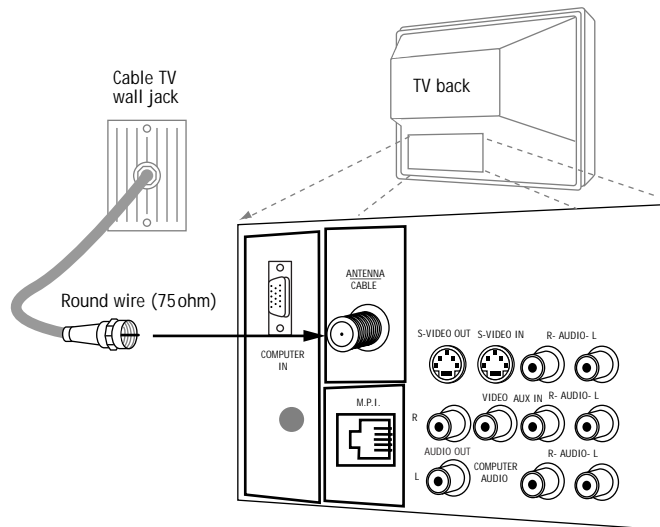
L   COMPUTER
     AUDIO

Cable TV
wall jack

5 Go to page 23 to Auto Program the Presentation TV.

In   Cable box

Out   output
      switch 3 4

VCR back

VCR back AV panel

RF coaxial wire (75 ohm)

In   output
      switch 3 4

Out Video Audio

TV back

Leave the VCR and the television tuned to channel three and use the cable box to change channels.

RF coaxial
wire (75 ohm)
*not included
with TV*

No A/V cables are included with your Presentation TV. Without A/V cables, most VCRs will not play videocassettes in stereo sound.

ANTENNA
CABLE

COMPUTER
IN

S-VIDEO OUT S-VIDEO IN R- AUDIO- L

A/V cables
*not included
with TV*

M.P.I.

VIDEO AUX IN R- AUDIO- L

R

AUDIO OUT   R- AUDIO- L

L   COMPUTER
     AUDIO

206-3492-A
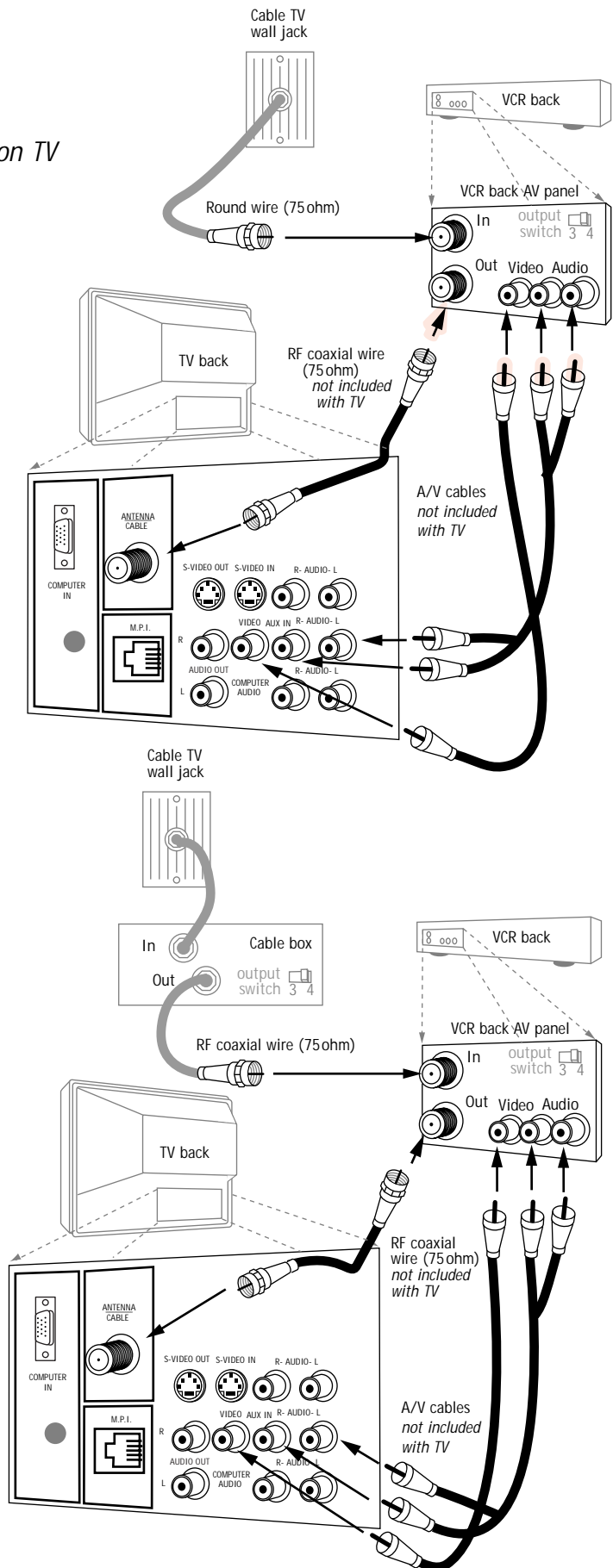
Your Zenith TV may be connected to a Super-VHS VCR through the S-Video Input located on the connection panel on your TV. Also, you may "daisy chain" up to five TVs to one Super VHS VCR through the special S-Video LOOP OUT connection.

1 Hook up your S-VHS VCR to your Zenith TV according to the diagram below.

2 Remove the back of the remote and put in two AAA batteries.

back of remote

AAA
AAA
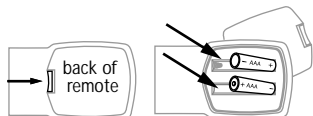
3 Plug in your TV. Do not plug it into a switched outlet. Your Zenith TV is designed to operate on standard current, 120-volt 60 Hertz AC. Do not attempt to operate it on DC Current.

4 If you wish to "daisy chain" more than one TV to receive the S-VHS signal, you will need to make the following connections with an S-Video cable, inserting one end of the cable into the LOOP OUT port with the other end inserted into a S-Video In port of your second Zenith TV or equivalent input for any other brand of TV.

VCR back

TV back

VCR back AV panel

output switch 3 4

S-Video Out   Audio Out
                R   L

ANTENNA
CABLE

COMPUTER
IN

M.P.I.

S-VIDEO OUT S-VIDEO IN   R- AUDIO- L

VIDEO AUX IN R- AUDIO- L
R

AUDIO OUT   R- AUDIO- L
            COMPUTER
L   AUDIO

4

S-Video cable
*not included
with TV*

Connect Audio Out
to an external
amplifier and
speakers.
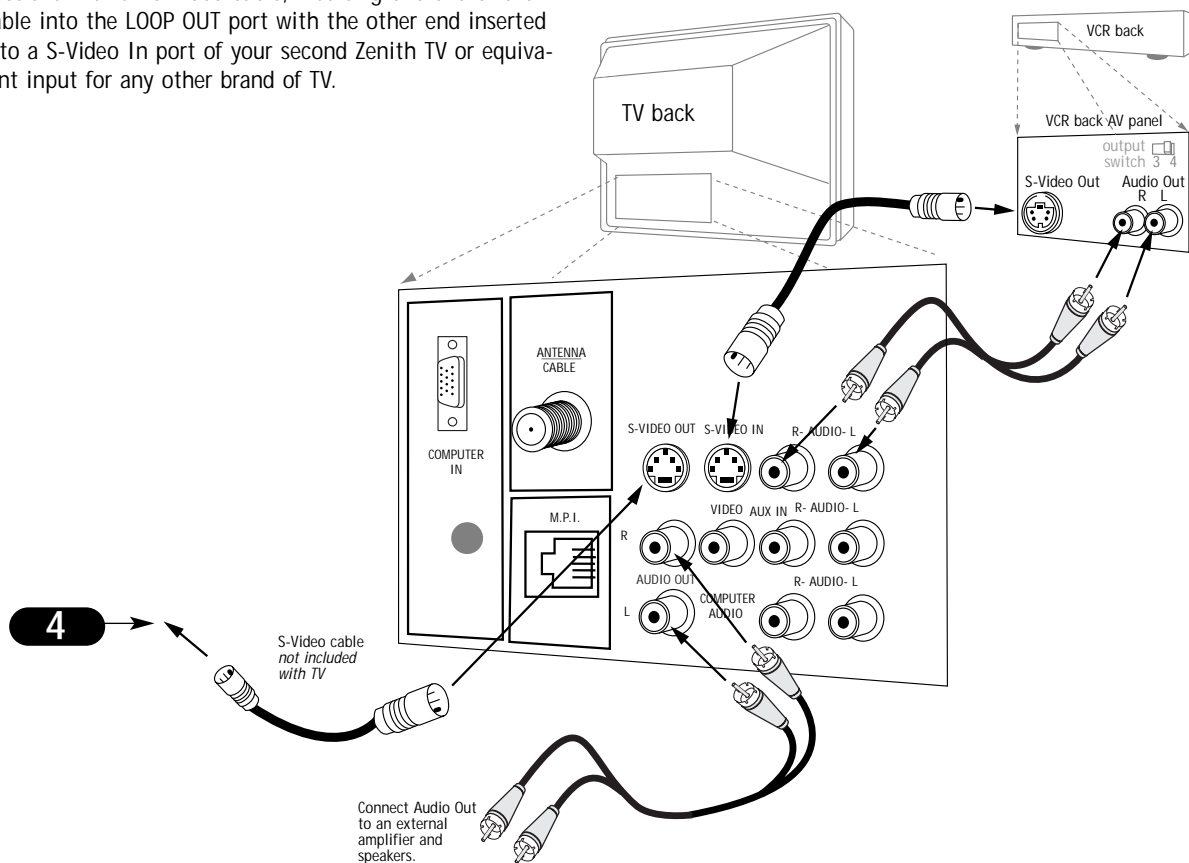
Audio Out Hookup

You can send the sound from the TV to an external amplifier

1 Audio Output: Use the Left and Right Audio Out jacks to connect an external amplifier and speakers. (Refer to the Audio Menu on page 34 for instructions on how to turn the TV's internal speakers off and on.)

2 Control the Volume level settings using your external amplifier.

TV back

COMPUTER IN

ANTENNA CABLE

M.P.I.

S-VIDEO OUT S-VIDEO IN R- AUDIO- L

VIDEO AUX IN R- AUDIO- L

R

AUDIO OUT

COMPUTER AUDIO

R- AUDIO- L

L

Connect Audio Out to an external amplifier and speakers.

206-3602
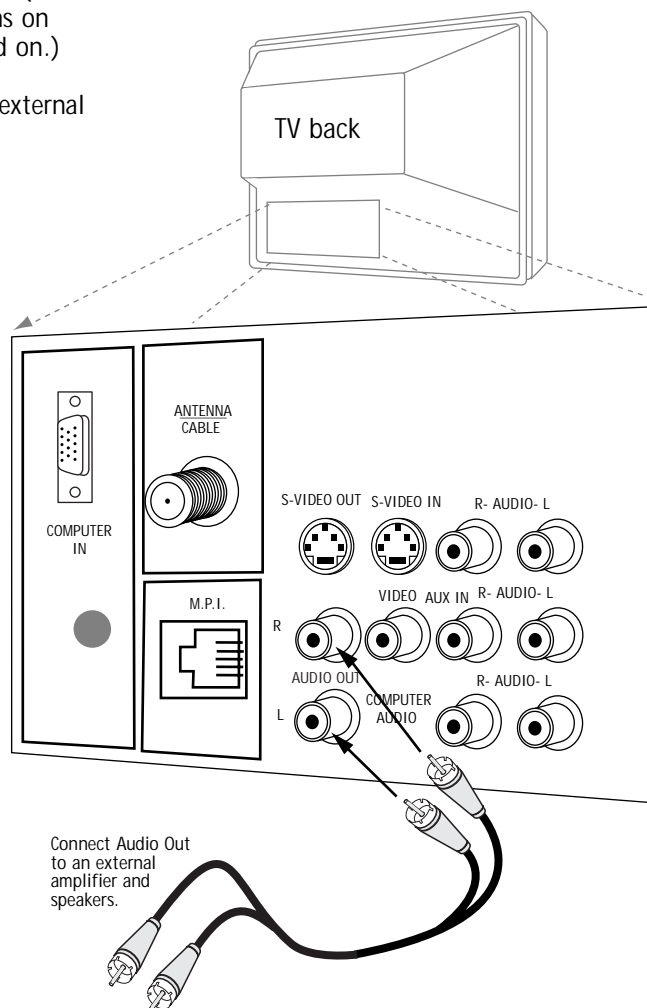
Auto Program (Channel Search)

Use Auto Program to specify Antenna or cable service incoming signal source and automatically store all of the channels found by the channel search

```
                    SETUP MENU

  ▶ AUTO PROGRAM    ◀▶ TO PROGRAM
    ADD/DEL/BLNK
    CH. LABELS
    CLOCK SET
    CAPTIONS
    ALARM MENU
    LANGUAGE
```
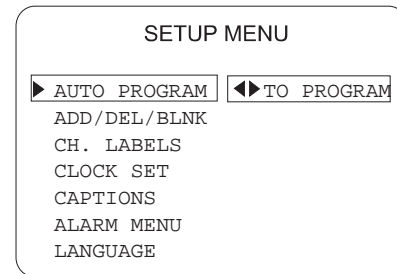
1 With the remote control in hand, press the POWER key to turn on the Presentation TV.

2 Press MENU repeatedly until the Setup menu appears.

3 Using the UP arrow on the remote control, highlight Auto Program on the screen.

4 Press a Right or Left arrow to go to the Auto Program menu.

5 Using the UP arrow, choose either Cable TV or Off-Air Antenna on your screen.

6 Press a Right or Left arrow to begin the Channel Search.

7 Press ENTER when the channel search is done.

Note: Auto Program finds channels being received by the TV tuner.

Cable will not work unless you subscribe to a cable service.
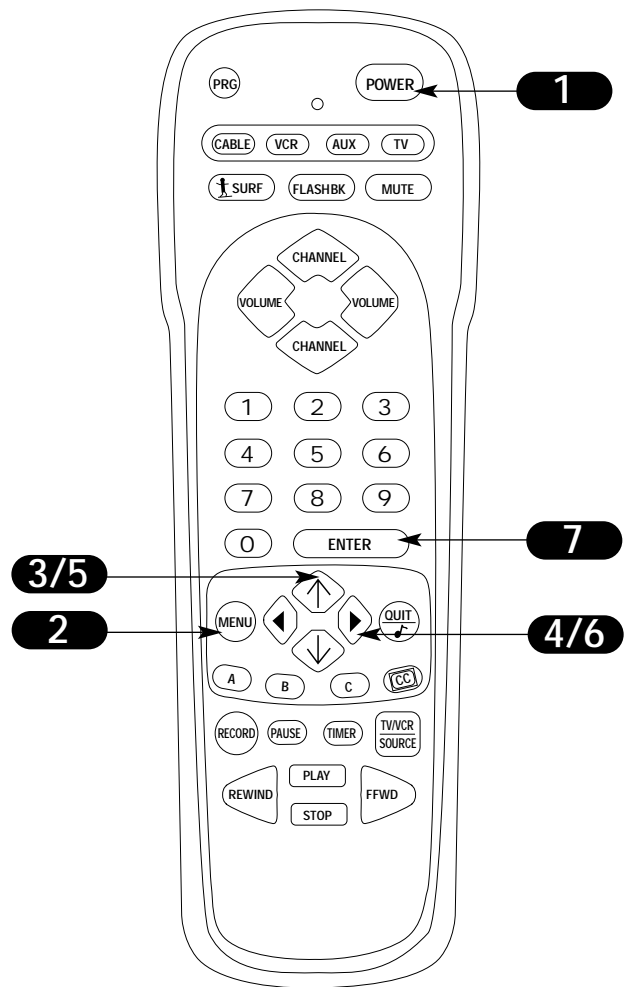
Mini glossary

OFF-AIR-ANTENNA   If only over-the-air channels are available, select Antenna.

CABLE   If you subscribe to a cable service, select Cable.

Using the front control panel to access the menus

1 To access the menus press the MENU button on the control panel. Cycle through the various menus by pushing the button repeatedly.

2 Press the SELECT button repeatedly to highlight the option you want to modify.

3 Press either the Right or left ADJUST button to modify the selected option.

4 The menu will disappear after a few seconds.

There are three jacks on the front of the Presentation TV that make connecting Audio/Video devices like camcorders very simple.

To use the front jacks as the signal source, simply plug a composite video cable into the VIDEO jack. The TV will automatically change its source setting to CAMPORT, as indicated on the channel selection screen.

The Front Audio/Video jacks are a direct source connection. If you have a device plugged into the front Video jack, you will not be able to change channels until you have unplugged the front Video jack.

Typical Front Panel Controls

captions ◄ adjust ► select menu ▼ volume ▲ ▼ channel ▲ power

1

3 **2**

reset   computer in   video L audio R

Left/Right Audio
Used for stereo sound from various types of equipment.

Reset
Used in conjunction with the Clone Programmer.

Front Computer Port
Used for 800 x 600 60Hz SVGA type computer hookup.

Video
Connects the video signals from any piece of equipment.
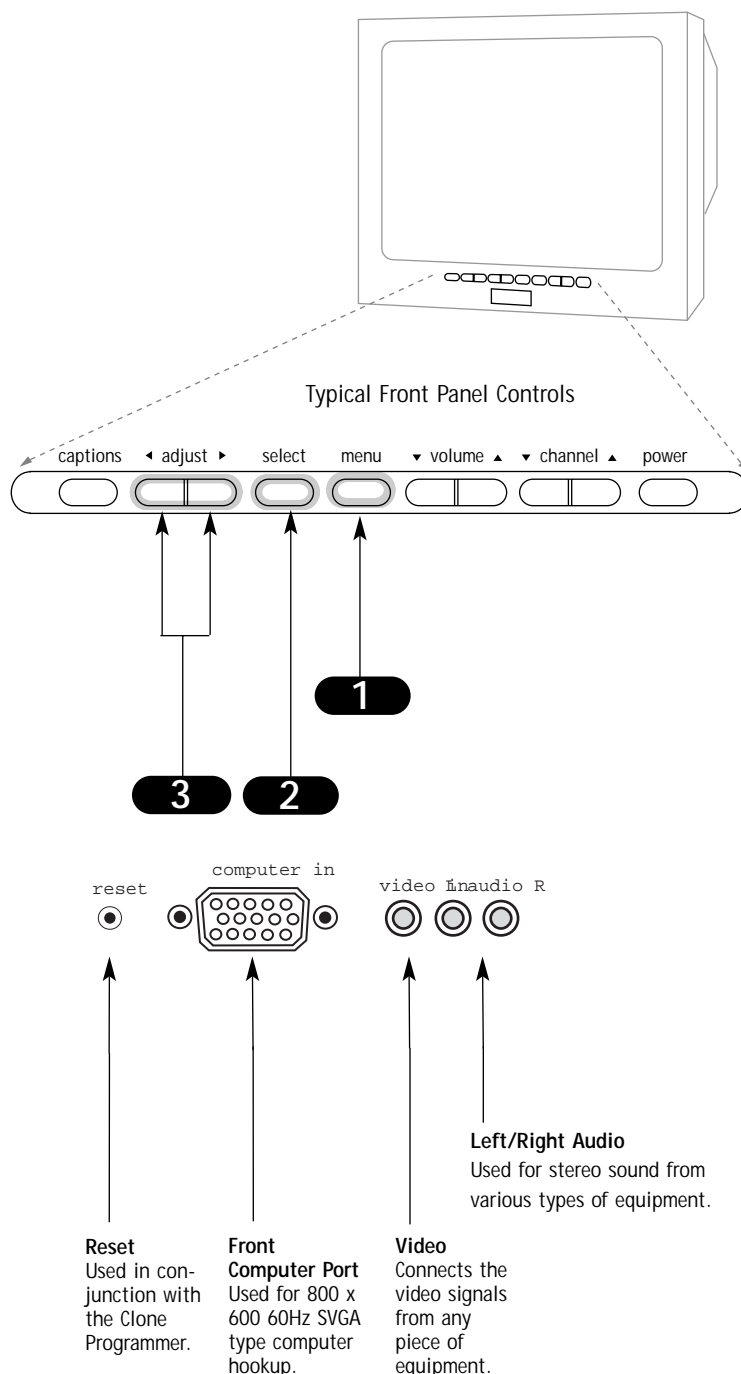
To put remote into TV operating mode, press TV

POWER
Turns TV On or Off.

PRG (PROGRAM)
Programs remote to operate other products.

LED INDICATOR LIGHT
Lights when keys are pressed.

CABLE/VCR/AUX/TV (MODE KEYS)
Switches remote mode to control other devices. AUX is for optional devices.

SURF
Access Channel preview and sources menu.

FLASHBK (FLASHBACK)
Returns to the last channel viewed.

MUTE
Turns sound Off and On while the picture remains.

CHANNEL (UP/DOWN)
Chooses next higher/lower available channel.

VOLUME LEFT/RIGHT
Adjusts the sound levels on your Presentation TV.

NUMBER KEYPAD
Selects channels directly and enters numeric values for some options.

ENTER
Shows the Channel/Time display. Press after channel numbers for instant selection.

LEFT/RIGHT ARROWS
The Left/Right arrows *adjust* menu options.

UP ARROW
The Up arrow *selects* menu options.

MENU
Displays on-screen menus for TV mode.

QUIT
Not functional.

CC (CLOSED CAPTIONING)
Displays the closed captions/text menu.

TIMER
Displays the Sleep Timer Menu.

TV/VCR-SOURCE
Switches between watching TV through the antenna/cable source, composite video source, S-VHS source, or any Computer source.

Keys dedicated to VCR functions will still operate your VCR while the remote is in TV mode.

The DOWN arrow key is reserved for FM/TV on other models.

remote control part number
MBR3447CT
124-233-04

206-3492-0

Descriptions of the menus and on-screen displays

Using the MENU key and other keys indicated on the remote, the user can access the menus and displays described below.

Menu Name	Page	Description
		ON-SCREEN MENUS
SETUP MENU		Adjusts the basic characteristics of the TV
Auto Program	23	Automatically finds and stores active channels to scroll through using Channel Up/Down.
Add/Del/Blnk	27	Manually picks and chooses which active channels will appear when using Channel Up/Down.
Channel Labels	28	Labels your channels with their network names (ABC, CBS, HBO, etc.).
Custom Ch Labels	29	Create your own custom channel labels.
Clock Set	30	Sets the time.
Captions	31	Sets the Caption/Text options.
Alarm Menu	32	Sets a time for the TV to automatically turn itself on.
Language	33	Picks the language the on-screen menus will appear in.
AUDIO MENU	34	Customizes the sound. The options are: Bass, Treble, Balance, Audio Mode, SoundRite, Front Surround, Speakers, Audio Pref.
VIDEO MENU	35	Customizes the picture. The options are: Contrast, Brightness, Color, Tint, Sharpness, Picture Pref.
PARENTAL CONTROL MENU	36	Allows user to block program content or the A/V sources for up to 99 hours, with the use of a password.
		OTHER MENUS AND ON-SCREEN DISPLAYS
Source	38	Selects between available viewing sources; press TV/VCR/SOURCE.
Channel/Time	38	Shows the current time, channel, video and type of incoming audio signal, or mute.
Alarm	38	Sets a wake-up time for the TV to turn itself on; see the Setup menu.
Sleep Timer	38	Sets the time the TV will turn off; press TIMER.
Volume	38	Shows current sound level setting; press VOLUME Up/Down.
Captions/Text	38	Use to select Caption/Text options; press CC.
Ch Preview	38	Displays the available channels list; press SURF.
Installer Menu	46	Shows operation adjustment levels and settings (for installer use).
		SERVICE MENUS See Service Manual

Setting Add/Delete/Blank

Fine-tune the channel selection list

```
                    SETUP MENU

         AUTO PROGRAM
      ▶  ADD/DEL/BLNK    ◀▶ CH 44  ADDED
         CH. LABELS
         CLOCK SET
         CAPTIONS
         ALARM MENU
         LANGUAGE
```
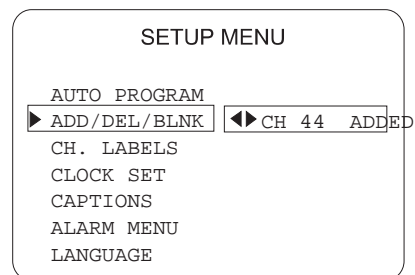
1 Press MENU on the remote repeatedly until the Setup menu appears.

2 Press the UP arrow repeatedly to highlight the Add/Del/Blnk option.

3 Using either the NUMBER keypad and ENTER or the Channel Up/Down arrows on the remote, select a channel. (If adding a deleted channel, you will need to use the NUMBER keypad and ENTER.)

4 Using the Right or Left arrow, choose whether that channel is Added, Deleted, or Blanked.

5 To continue, select another channel and repeat Step 3. When you are finished, press ENTER to remove menu.

If you delete a channel, it isn't gone for good. Just select it using the NUMBER keypad on the remote, or add it later.
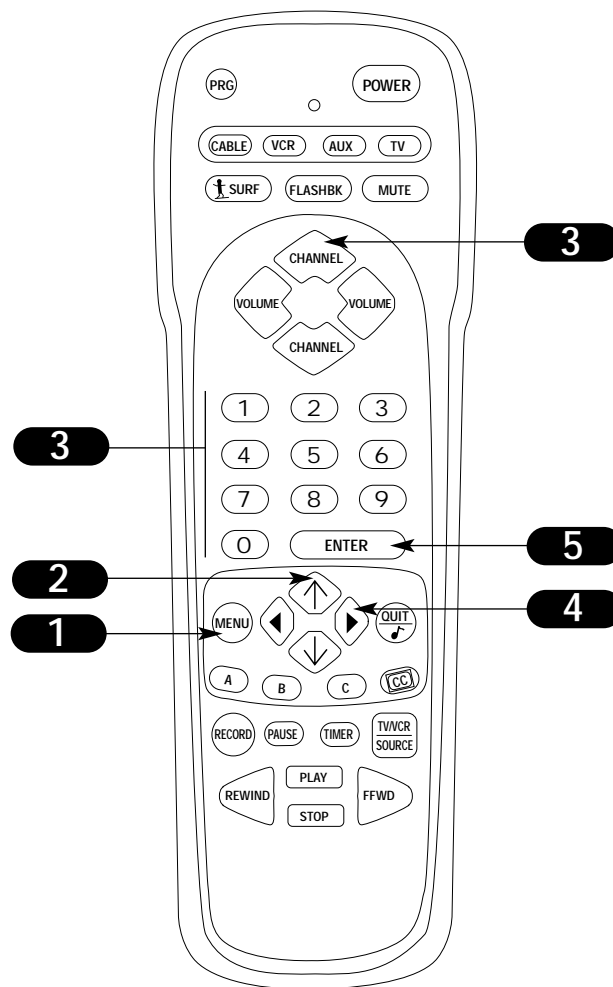
Mini glossary

ADD   Adds new channels to the list that the user can scroll through when using the remote.

DELETE Removes channels for one reason or another from the list that the user can scroll through.

BLANK   Removes the video and audio signal from a channel.

Using Preset Channel Labels

```
                              SETUP MENU

                         AUTO PROGRAM
                         ADD/DEL/BLNK
                       ▶ CH. LABELS      ◀▶ CH 32   FOX
                         CLOCK SET
                         CAPTIONS
                         ALARM MENU
                         LANGUAGE
```

*Customizing channel names with the Preset Channel Labels
(Or, see the next page to create your own custom channel
labels)*
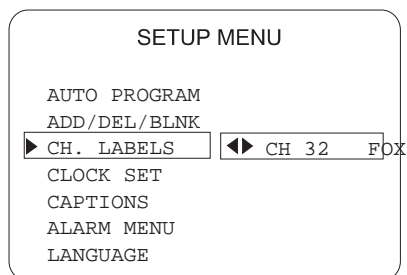
1 Using either the NUMBER keypad or the Channel
Up/Down arrows on the remote, select a channel.

2 Press MENU on the remote repeatedly until the Setup menu
appears.

3 Choose the Ch Labels option using the UP arrow.

4 Pressing either the Right/Left arrow repeatedly, pick the
label you want from the available selections;
such as A & E.

5 To continue channel labeling, select another channel or
if you are finished, press ENTER to remove menu.

*Some channels already provide a channel label which is included
with the broadcast signal.*

*Labeling the channels helps the identify which familiar nationwide
channels are available. i.e., A & E -Arts and Entertainment, CNN -
News, ESPN - Sports, HBO - Movies and so on...*
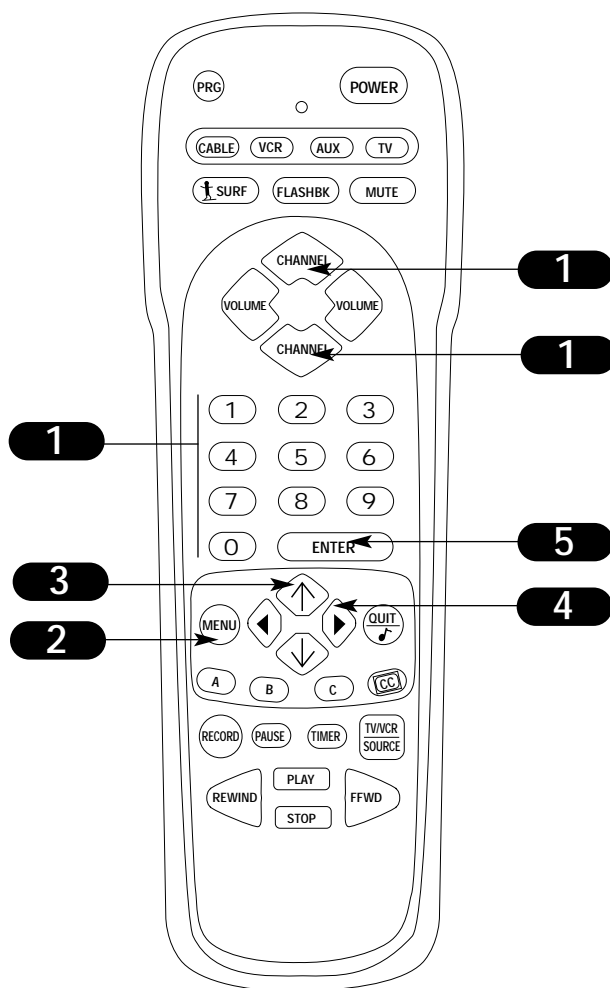
Mini glossary

- - - - The 4 dashes will allow a channel label to appear; if one is provided by the broadcaster.

NONE Prevents any channel label from appearing.

LAB 1, Are the 20 programmable labels. These 20 labels can be customized with 5 characters spaces available for each label.
thru **LAB 20**,

206-3602

Customize channel names by using your own custom channel labels

```
          SETUP MENU

  AUTO PROGRAM
  ADD/DEL/BLNK
▶ CH. LABELS      ◀▶ CH 30   MYLAB
  CLOCK SET
  CAPTIONS
  ALARM MENU
  LANGUAGE
```

To Program a Channel Label

1 First select a channel using the NUMBER keypad and ENTER or the Channel Up/Down arrows, on the remote control.

(To select a deleted channel, use the NUMBER keypad and ENTER.)

2 To program a channel label, press MENU repeatedly to go to the Setup menu, then select CH LABELS.

3 Press the Right Adjust arrow to scroll the available preset labels. Scroll past - - - -, scroll past NONE, to go to the first programmable label slot, LAB 1 (Label 1). Notice that the label appears with the title LAB 1, and is also on a dark background; which will distinguish it from the preset labels.

Operating the Custom Labels Menu

4 Use Volume Up/Down to select the first letter.

a. Press MUTE to clear the label if necessary.

5 Use Channel Up/Down to scroll through and change the character to one of the 255 characters available.

Repeat Steps 4 and 5 to set characters for the other spaces available on the label.

6 Press ENTER to remove menu when finished.

Menu Operation Notes:

Adjust Left/Right	Switches to the next label. - - moves to the next or previous label.
Volume Up/Down	Selects character spaces - - moves to the next or previous character space.
MUTE	Removes current label, - - if first character space is selected.
Channel Up/Down	Scrolls through the available characters.
ENTER	Accept the channel label and removes the menu.
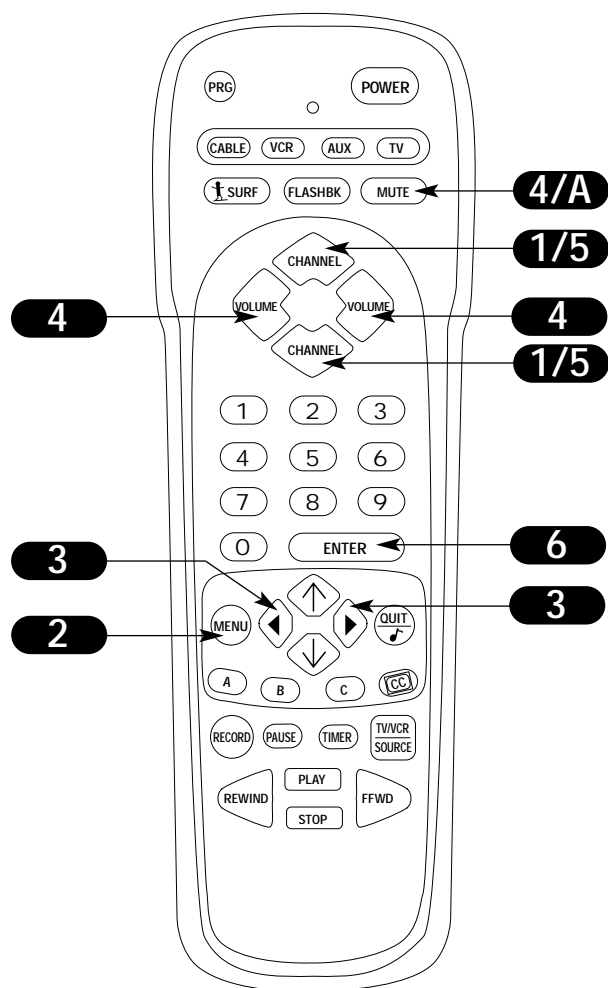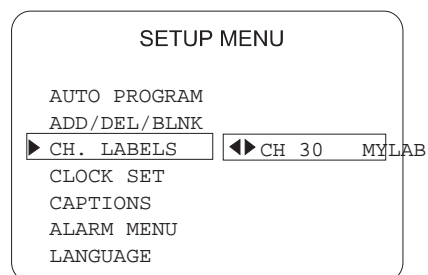
Mini glossary

- - - - The 4 dashes will allow a channel label to appear; if one is provided by the broadcaster.

NONE Prevents any channel label from appearing.

LAB 1, thru **LAB 20**, Are the 20 programmable labels. They can be customized for your needs with 5 characters spaces available on each label.

206-3602

Set the Clock

Set the clock on the Presentation TV

```
         SETUP MENU

    AUTO PROGRAM
    ADD/DEL/BLNK
    CH. LABELS
  ▶ CLOCK SET    ◀▶10:32 AM TIMER
    CAPTIONS
    ALARM MENU
    LANGUAGE
```
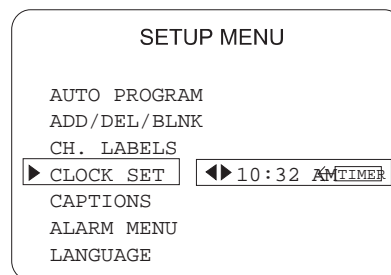
1 With the Setup menu on screen, use the Up arrow to highlight the Clock Set option as shown.

2 Set the current time; use the NUMBER keypad to enter the hours, then minutes. For example, enter 06, then 30, to set 6:30 on the clock.

3 Use the TIMER key to set AM or PM.

4 Press ENTER to start the clock and return to TV viewing.

The Sleep Timer may be instantly set by pressing the TIMER key repeatedly. When you have made your selection, press ENTER to set the timer and return to TV viewing.
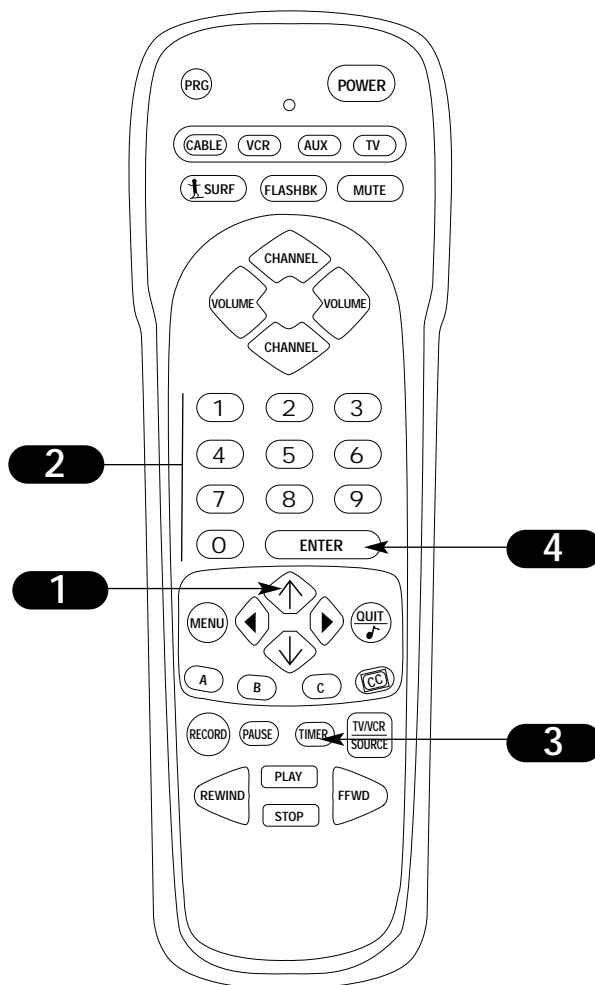
Mini glossary

TIME   A four-digit figure broken down into hours and minutes, that is used to enter the current time when setting the clock.

HOURS   The first two digits that are entered when setting the clock.

MINUTES   The last two digits that are entered when setting the clock.

TIMER   Used to choose AM or PM when setting the clock.

206-3602

Set up Closed Caption/Text options for the user

```
SETUP MENU

AUTO PROGRAM
ADD/DEL/BLNK
CH. LABELS
CLOCK SET
▶ CAPTIONS        ◀▶ TO SET CAPTIONS
  LANGUAGE
```

```
CAPTIONS SETUP

▶ OPER. MODE  ──────────────────── QUICK/MUTE
  SEL. CC TYPE
  CC CAPTION                        CAPTION 1
  CC ON MUTE                        CAPTION 2
  CAPTION LOCK                      CAPTION 3
                                    CAPTION 4
  PRESS SELECT TO CHOOSE            TEXT 1
  PRESS ADJ ◀▶ TO CHANGE           TEXT 2
                        ── ON, OFF  TEXT 3
                                    TEXT 4
                   ── ON, OFF

              ── ON, OFF
```

```
SETUP MENU

AUTO PROGRAM
ADD/DEL/BLNK
CH. LABELS
CLOCK SET
▶ CAPTIONS        ◀▶ TO SET CAPTIONS
  LANGUAGE
```

```
CAPTIONS SETUP

▶ OPER. MODE  ──────────────────── STANDARD
  SEL. CC TYPE
  CAPTION LOCK                      CAPTION 1
                                    CAPTION 2
                                    CAPTION 3
  PRESS SELECT TO CHOOSE            CAPTION 4
  PRESS ADJ ◀▶ TO CHANGE ── ON, OFF TEXT 1
                                    TEXT 2
                                    TEXT 3
                                    TEXT 4
                                    OFF
```

Closed Captions/Text Operating Modes Setup

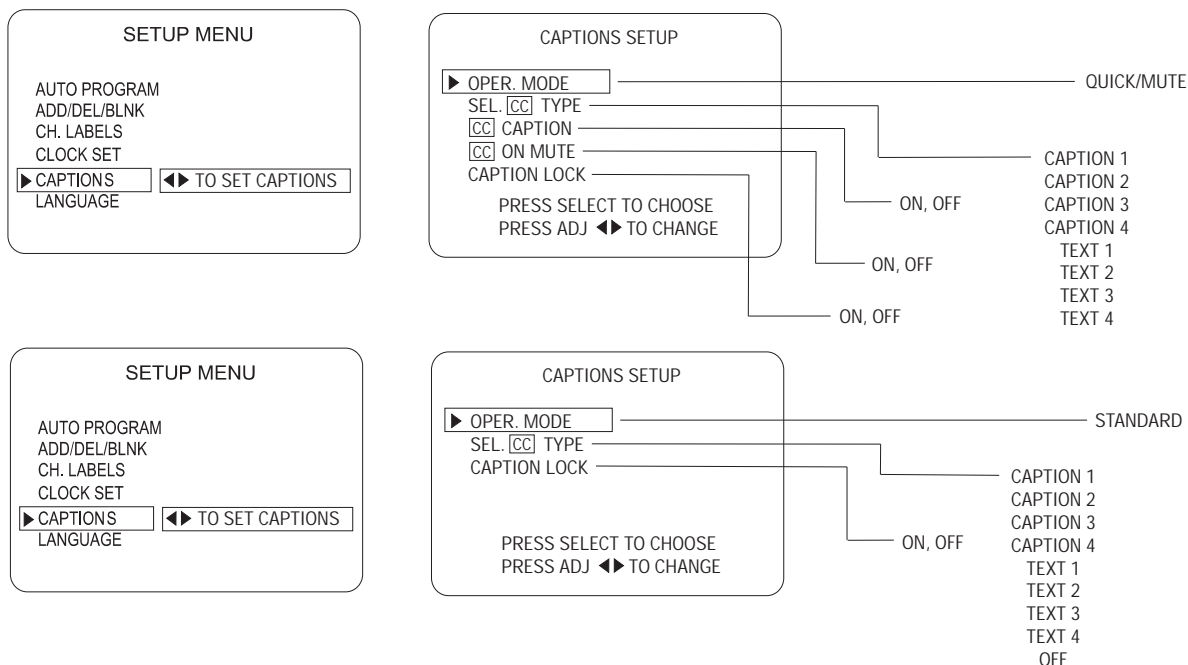Use MENU, SELECT, and ADJ Left/Right to choose the Closed Captions/Text mode and to set up the other menu options for the user.

Quick/Mute   When CC is pressed: User can only turn Captions on/off.
(If CC on Mute is on, shows captions option on mute.)
(If locked, type is retained with Power on/off.)

Standard   When CC is pressed: User can choose a captions type.
(If locked, type is retained with Power on/off.)

Press ENTER repeatedly to remove menus.

☺ *Standard closed captioning is available using the Caption 1 option.*

Caption/Text is a feature which allows the TV to receive the closed caption and/or text options if made available by the broadcaster. Availability and functionality of Caption/Text features is determined only by each broadcaster and may not be available in your area.
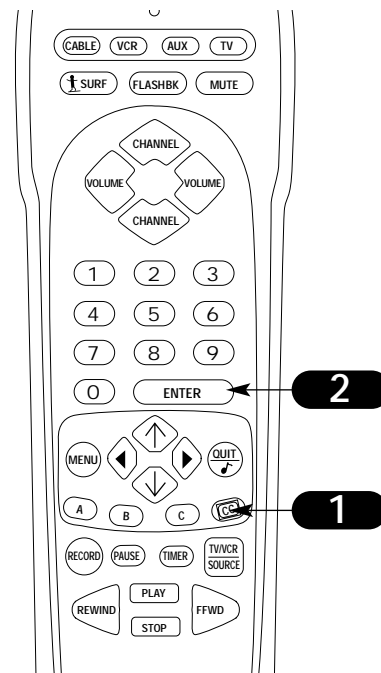
Mini glossary

CAPTIONS	The term for the words that scroll across the bottom of your TV screen; usually the audio portion of the program provided for the hearing impaired.
TEXT	The term for the words that appear in a large black frame and almost cover the entire screen; usually messages provided by the broadcaster.

Setting the Wake Up Alarm

Use the Alarm menu to set a time for the TV to automatically turn itself on

```
          SETUP MENU
     AUTO PROGRAM
     ADD/DEL/BLNK
     CH. LABELS
     CLOCK SET
     CAPTIONS
   ▶ ALARM MENU      ◀▶TO SET ALARM
     LANGUAGE
```

```
          ALARM MENU

     TIME NOW      3:11 PM


      6:10   AM←──TIMER

   PRESS DIGITS TO SET TIME
   TIMER TO SELECT AM/PM
```
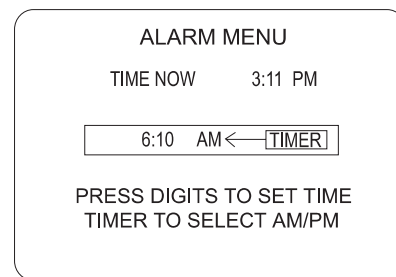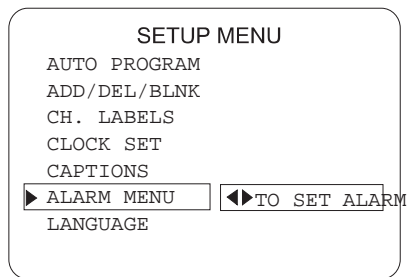
1 With the Alarm Menu option highlighted in the Setup menu, press the Left/Right arrow go to the menu.

2 Using the NUMBER keypad, set the time you want the TV to turn on. For example, to set 7:30 AM, press 0, 7, 3, 0.

3 Use TIMER to set AM/PM.

4 Press ENTER to remove menu.

The alarm will only work if the TV is turned off.

A Wake-up Alarm cannot be set if the clock is not set to the current time.

SETUP MENU
AUTO PROGRAM
ADD/DEL/BLNK
CH. LABELS
CLOCK SET
CAPTIONS
ALARM MENU
▶ LANGUAGE   ENGLISH
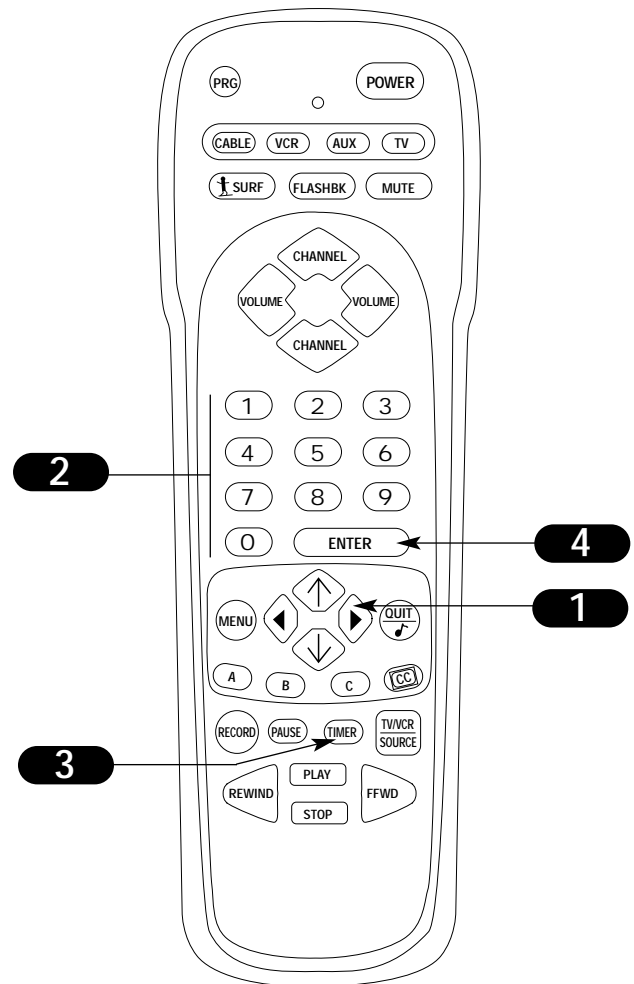
Choose the language for the on-screen menus
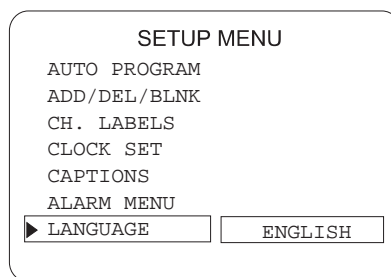
1 Press MENU on the remote repeatedly until the Setup menu appears.

2 Use the UP arrow on the remote control, to highlight Language on your screen.

3 Press a Left/Right arrow to choose one of the following options: English, Spanish or French.

4 Press ENTER to return to TV viewing.

```
AUDIO MENU
▶ BASS        ◄———————┼———————►
  TREBLE      ◄————┼———————————►
  BALANCE     ◄——————————┼—————►
  AUDIO MODE       STEREO
  SOUNDRITE        OFF
  FRONT SURROUND   ON
  AUDIO PREF       CUSTOM
```

Customize the sound coming from the TV
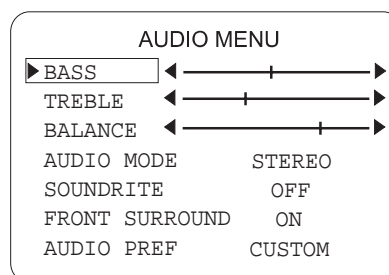
1 Press MENU repeatedly on the remote control until the Audio menu appears.

2 Using the UP arrow on the remote control, highlight the audio option you want to change. Choose from:

- **Bass**: Increases/decreases lower-end sounds.

- **Treble**: Increases/decreases higher-end sounds.

- **Balance**: Allows you to put the sound more to the left or right channel.

- **Audio Mode**: Choose from Stereo sound, Mono, or 2nd Audio/SAP.

- **SoundRite**: Turns the uniform volume feature on or off.

- **Front Surround**: Turns front surround on or off.

- **Audio Pref**: Selects Custom or Preset.

3 Press a Left/Right arrow to adjust or change the option you have selected.

4 Press ENTER to return to TV viewing, or press the UP arrow and return to the Audio Menu to adjust other options.
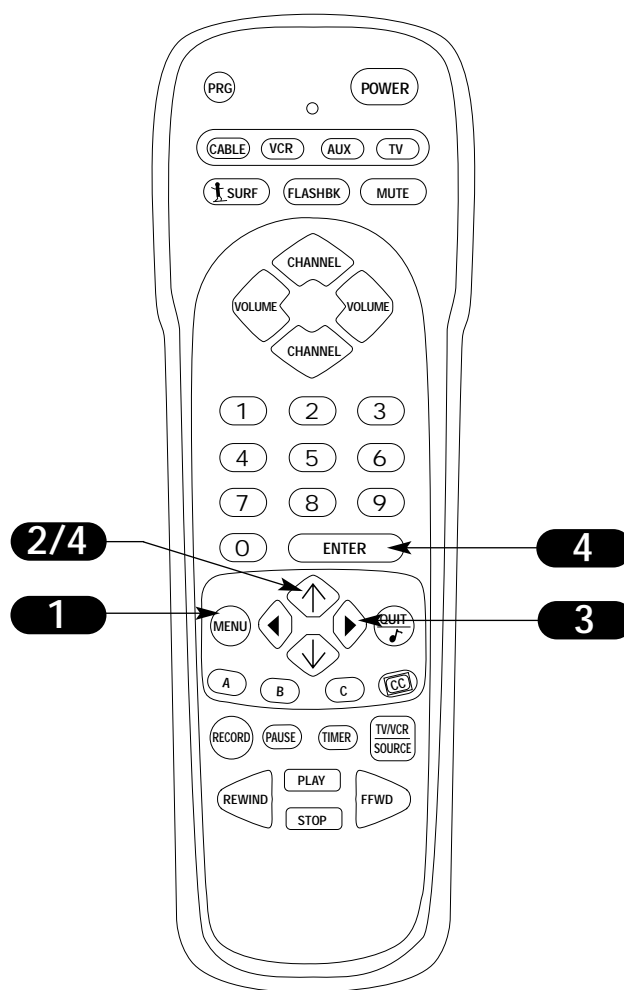
Not all programming is broadcast in stereo sound or has 2nd Audio SAP.

Mini glossary

STEREO SOUND   Stereo (stereophonic) sound refers to audio that's divided into right and left sides.

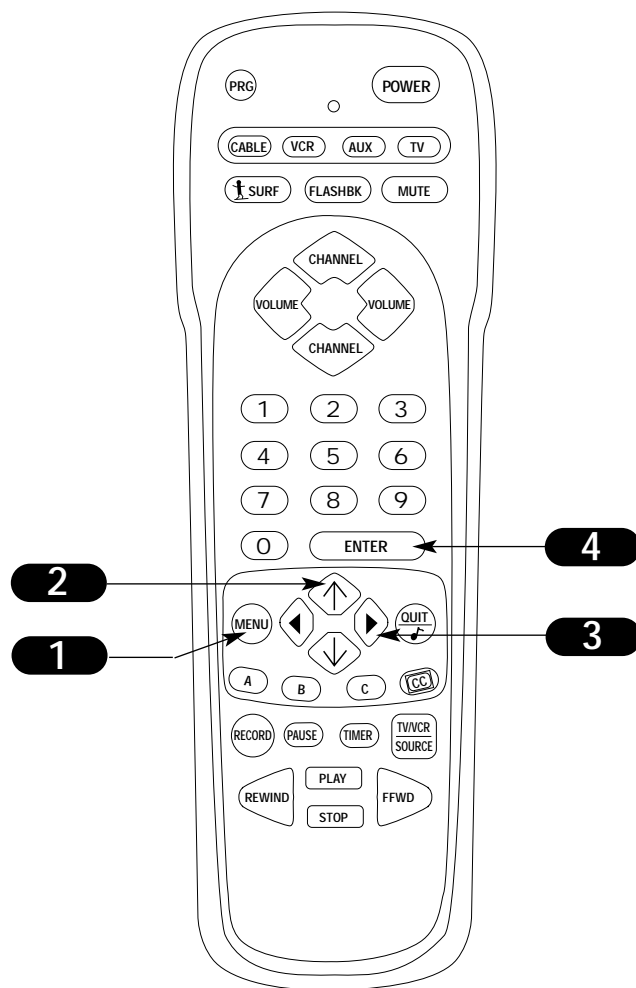MONO SOUND   Mono (monaural) sound is one channel of sound. On more than one speaker, all the speakers play the same audio.

CUSTOM   Your own audio menu settings.

PRESET   Original audio menu values before any custom changes have been made.

*Use either the TV Video Menu for TV
sources or the Computer Video Menu
for computer sources to customize
the picture image*

```
          VIDEO MENU

▶CONTRAST    ◄————————┼——►
 BRIGHTNESS  ◄—————┼—————►
 COLOR       ◄————————┼——►
 TINT        ◄————┼———————►
 SHARPNESS   ◄————┼———————►
 PICTURE PREF    CUSTOM
```

```
       COMPUTER VIDEO MENU
▶CONTRAST    ◄—————————┼——►
 BRIGHTNESS  ◄————┼————————►
 RED         ◄———————┼————►
 GREEN       ◄————————┼———►
 BLUE        ◄—————————┼——►
 HORZ. POS.  ◄————┼————————►
 VERT. POS.  ◄————————┼———►
 HORZ. SIZE  ◄————————┼———►
 VERT. SIZE  ◄————————┼———►
 PICT. PREF       PRESET
```
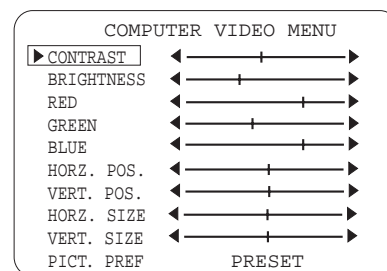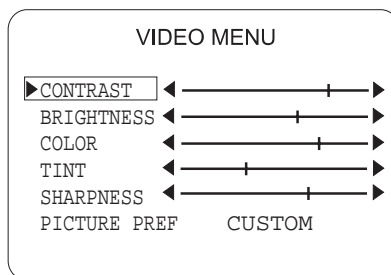
Note: For Computer Video Menu, connect and select a computer
source.

1 Press the MENU key repeatedly until the Video menu appears.
Your options are:

• **Contrast**: Adjusts the level of difference between white and
black in the TV picture. The more contrast, the brighter the
picture appears.

• **Brightness**: Increases or decreases amount of white in the TV
picture.

• **Color**: Adjusts levels of all colors in the TV picture.

• **Tint:** Adjust the relative amounts of the color red and green
in your picture.

• **Sharpness:** Raise or lower the definition of the picture. The
lower the level, the softer the image will appear..

• **Red/Green/Blue**: Adjusts level of color in the picture.

• **HORZ Position**: Adjusts horizontal position of picture.

• **VERT Position**: Adjusts vertical position of picture.

• **HORZ Size**: Adjusts horizontal size of picture.

• **VERT Size**: Adjusts vertical size of picture.

• **Picture Preference**: Choose either Custom or Preset. Custom
allows you to set the picture the way you want. Preset moves
all the above options back to their original, factory-set levels

2 Using the UP arrow on the remote control, choose Contrast on
your screen.

3 Using a Left/Right arrow, change the contrast level to your pref-
erence.

4 Press ENTER, to return to TV viewing, or repeat from Step 2 to
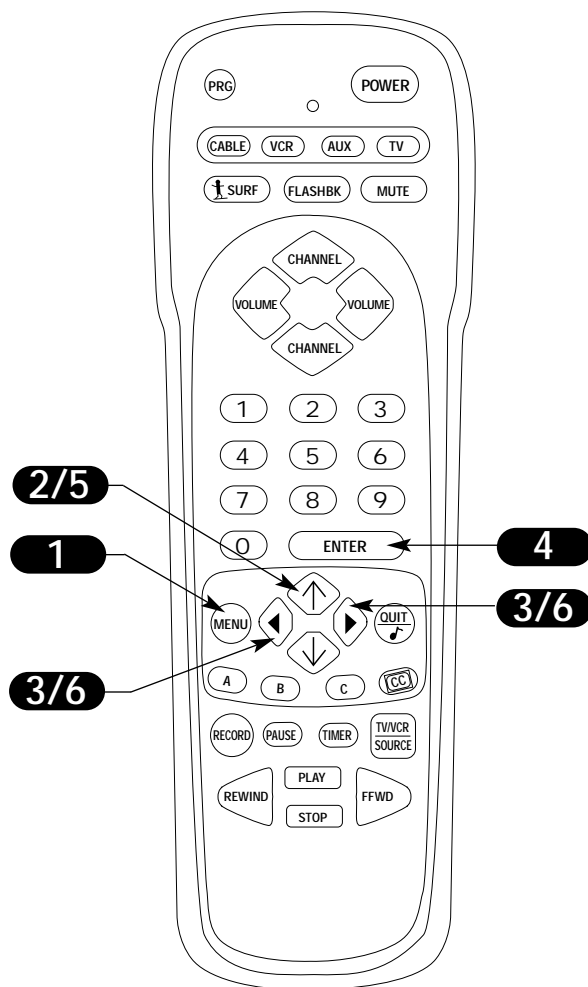set the other menu options.

5 Use the UP arrow to choose Picture Preference on your screen.

6 Use the Left/Right arrow, to choose either the original settings
with Preset, or use your own settings with Custom.

☺ *Choose the Preset option in Picture Preference to quickly reset the
levels to their original values.*

If used, this optional feature can "block" undesirable programming from appearing on the TV. Note: Parental Control is not available in Computer Mode. To block Computer inputs, use the block AUX SOURCES option in the Parental Control menu in TV Mode; computer inputs will not be available.

Parental Control offers the user a wide variety of options and settings that restrict or "block" the programming that can appear on the TV. Parental control allows the user the capability of defining which program rating they consider acceptable, to the younger or more sensitive viewer. It can be preset and turned either on or off by the user who specifies the secret 4-number code, the password. The number of hours blocked are specified. General audience and children viewer blocks should both be programmed into the TV's memory. Viewer ratings are specified for both TV and the motion picture industry; both rating systems should be used, for complete coverage. The ratings are based on the ages of children.

Overview

To insure complete coverage for all TV programs, (movies and regular TV shows) choose a rating for MPAA, from the selections below AND choose ratings from the TV Parental Guidelines Rating System on the next page, using the Age Block option for General Audiences, and for Children. In addition to those, you may wish to add additional restrictions from the Content Block menu. See the Parental Control menu, and submenus example on the next page.

Things to Consider before Setting Up Parental Control

Determine which rating you consider acceptable to the viewer. (For example, if you choose TV-PG, all more restrictive ratings will be automatically blocked; the viewer will not be able to see: TV-PG, TV-14, or TV-MA rated programming.)

Do you want to block the auxiliary video source entirely? (Blocks the signal sent by the equipment, such as a VCR, connected to the TV Audio/Video input jacks; in the Aux. Block option.) Or leave unblocked, then choose allowable ratings.

Block program "Content" based on individual parameters such as: Strong Dialog, Bad Language, Sex Scenes, Violence Scenes, or Fantasy Violence Scenes; in the Content Blk option.

How many hours do you want Parental Control to be active? You can set the Hours option for up to 99 hours.

Select a secret password; in the Set Password option. Use the number keys on the remote. Don't forget the password, it is the only way you can access the Parental Control menu and change rating selections, or turn Parental Control off.

Do you want Parental Control to be active all the time? If not, you can turn it on or off; with the Lock On/Off option.

You can set different Parental Control viewing restrictions for general audiences and for children - - both can be active at the same time.

Even if you choose to leave the Aux inputs unblocked, the ratings you specify will automatically restrict the programming that appears from the video sources.

Simply specifying one content block such as Sex Scenes, will not automatically block another content in the programs from appearing.

You cannot disable Parental Control by disconnecting the TV from power. Block hours will automatically reset to the original block time setting specified if power is disconnected.

Mini glossary

MOTION PICTURE ASSOCIATION OF AMERICA (MPAA) RATING SYSTEM

G	General Audiences	Content not offensive to most viewers.
PG	Parental Guidance Suggested	Content is such that parents may not want their children to view the program.
PG-13	Parental Guidance Suggested	Program is inappropriate for preteens, with a greater degree of offensive material than a PG rated program.
R	Restricted viewing	Not for children under age 17. Strong elements of sex and/or violence.
NC-17	Restricted Viewing	Not for children under age 17 under any circumstances. Strong sexual content.
X	Hard Core Films	Same as NC-17 rating.

Note: Zenith Electronics Corporation is not liable for any program content that appears when using this rating system; as always, user discretion is advised.

After you have read the preceding page, follow instructions below to set up and activate Parental Control

1

SETUP MENU

▶ AUTO PROGRAM   ◀▶ TO PROGRAM
ADD/DEL/BLNK
CH. LABELS
CLOCK SET
CAPTIONS
ALARM MENU
LANGUAGE

VIDEO MENU

▶ CONTRAST   ◀——+——▶
BRIGHTNESS ◀——+——▶
COLOR   ◀——+——▶
HOR POSITION ◀——+——▶
VER POSITION ◀——+——▶
PICTURE PREF   CUSTOM

PARENTAL CONTROL

AUX SOURCES
MPAA
▶ AGE BLOCK   ◀▶ TO BLOCK
▶ CONTENT BLK   ◀▶ TO BLOCK
SET HOURS
SET PASSWORD
LOCK ON OFF

AGE BLOCK

▶ GENERAL   UNBLOCKED
CHILDREN

CONTENT BLOCK

▶ DIALOG
LANGUAGE
SEX SCENES
VIOLENCE
F VIOLENCE
NO RATING

2 As shown above, with the Parental Control menu on-screen, use the UP arrow to highlight an option like Content Block, then press the Right arrow.

3 Use the Up/Left/Right arrows to select and adjust or set the rating for an option. For Sex Scenes for example, use the "From TV-PG" setting. (See the Mini Glossary, Ratings Charts on this and the previous page for rating definitions.)

4 After you have selected and adjusted the parental control menu options to your preferences:
- Set the hours you want Parental Control active.
- Set a 4-number password.
- Set the Lock On/Off option to either on or off.

😦 *No Rating means the broadcast does not include rating information. You can choose to block broadcasts without rating data.*

2/3   **2/3**
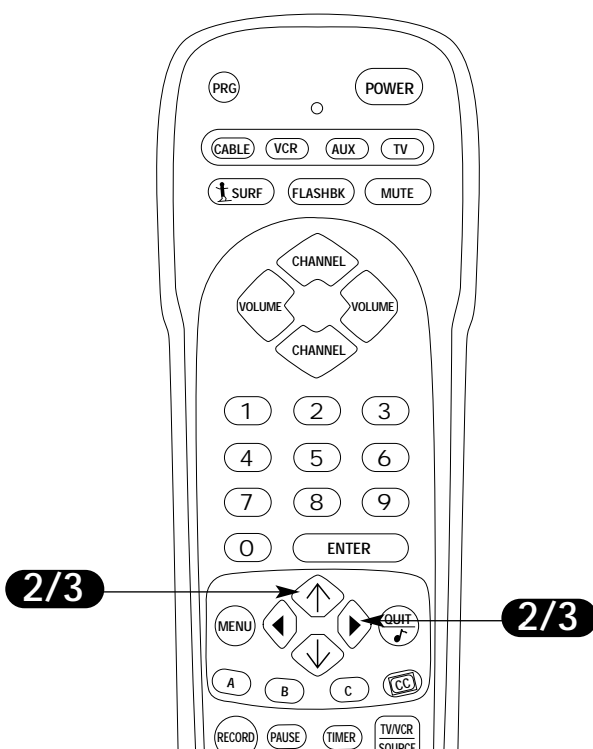
Mini glossary

TV PARENTAL GUIDELINE RATING SYSTEM

TV-G	General Audience	Considered suitable for all audiences; children may watch unattended.
TV-PG	Parental Guidance Suggested	Unsuitable for younger children, may contain: Suggestive Dialog, Bad Language, Sex, and Violence Scenes.
TV-14	Parents Strongly Cautioned	Unsuitable for children under 14, may contain: Strong Dialog, Bad Language, Sex, and Violence Scenes.
TV-MA	Mature Audience Only	Adults only, may contain: Strong Dialog, Bad Language, Sex, and Violence Scenes.

CHILDREN'S CLASSIFICATIONS

TV-Y	Children	Considered suitable for all children under 7 years old.
TV-Y7	Children 7 and over	Considered suitable for children over 7, may contain Fantasy Violence Scenes.

Press the remote keys indicated below to access these menus and displays

```
           SOURCE

    ┌─────────────────────┐
    │  ANTENNA/CABLE      │
    └─────────────────────┘

          PRESS:
     SOURCE TO CHANGE
    ENTER TO ACTIVATE
```
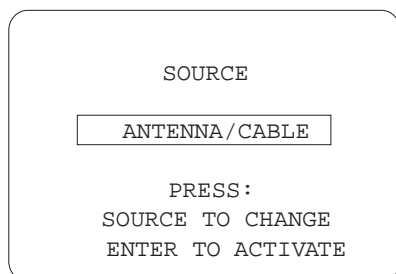
Source Menu
Press TV/VCR SOURCE. Gives access to the other available sources: Antenna/Cable, Camport, Aux Video, S-Video, Front Computer SVGA, Rear Computer SVGA, and Rear Computer NTSC.

```
           ALARM MENU

  TIME NOW      3:11    PM

    ┌──────────────────────┐
    │ 6:10  AM ←  ⌐TIMER⌐  │
    └──────────────────────┘

   PRESS DIGITS TO SET TIME
   TIMER TO SELECT AM / PM
```

Alarm Menu
In the Setup Menu, select the ALARM MENU option. Sets the time the TV will automatically turn itself on.

```
          SLEEP TIMER

         ┌────────┐
         │  OFF   │
         └────────┘

         PRESS TIMER
```

Sleep Timer Menu
Press TIMER. Shows remaining time before TV shutoff. Press TIMER repeatedly to set a turn-off time.

```



             VOLUME
  ◀■■■■■■■■■■■■■■────────▶
```
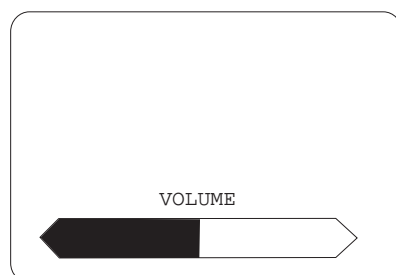
Volume Display
Press VOLUME. Shows currently selected sound setting.

```
        ┌──────────┐
        │ CH 9     │
        │ 3:12 PM  │
        │ STEREO   │
        └──────────┘
```
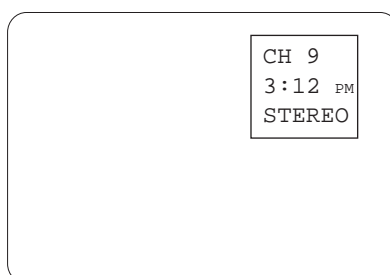
Channel/Time/Audio Display
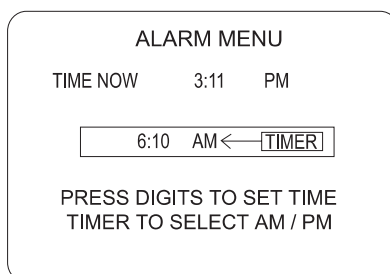Press ENTER. Shows currently selected channel or source, current time if the clock has been set, and incoming audio signal.

```
  ┌─────────────────────────────┐
  │  ⌐      CHANNEL PREVIEW    ⌐ │
  │       5        - - - -       │
  │       9        - - - -       │
  │  ▶   20        - - - -       │
  │      32        - - - -       │
  │      44        - - - -       │
  │     AUX        - - - -       │
  │                              │
  │  └ CH↑↓      TO SELECT, ENTER TO │
  │    CC   FOR PARENTAL CONTROL │
  └─────────────────────────────┘
```
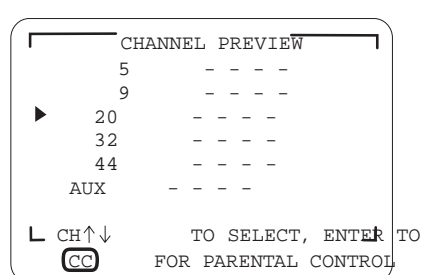
Ch Preview Menu
Press SURF. Displays list of the available TV Channels, sources, and provides Parental Control menu access.

```



          CC CAPTIONS 1 IS ON
```

Closed Captions Menu
Press CC. Depending on Captions setup, shows selected Caption/Text option.

Program your remote to control a variety of A/V devices

1 The device you want to program should be ON.

2 Refer to the brand programming codes on pages 43 - 44 to find the type and brand name of the device you're programming. Make a note of the three-number code—you'll need it soon.

3 Press and hold the PRG key. It's recessed so it doesn't get pushed accidentally. When the indicator light turns on, you can release the key.

4 Push the key with the name of the device you're programming (VCR, CABLE, AUX, TV).

5 Using the NUMBER keypad, enter the three-number code found on the chart in the Reference section.

6 Press ENTER to save the code The indicator light will flash three times and turn off if the code was accepted.

7 Point the remote at the device and push the POWER key. The device should turn off. If not, try the other codes listed and continue from Step 3.

Programming your Zenith remote will allow you to use one remote to work up to 7 different devices!

Not all devices will work with your Zenith remote control.

3
Indicator Light
PRG   POWER **7**
CABLE VCR AUX TV **4**
SURF FLASHBK MUTE
CHANNEL
VOLUME VOLUME
CHANNEL
5
1 2 3
4 5 6
7 8 9
0 ENTER **6**
MENU QUIT
A B C CC
RECORD PAUSE TIMER TV/VCR SOURCE
REWIND PLAY FFWD
STOP

Mode / Product Compatibility

TV	VCR	CATV	AUX (AUX+1, AUX+2, AUX+3)
TVs	VCRs	Cable Boxes, Satellite Receivers	All products on pp 43 - 44
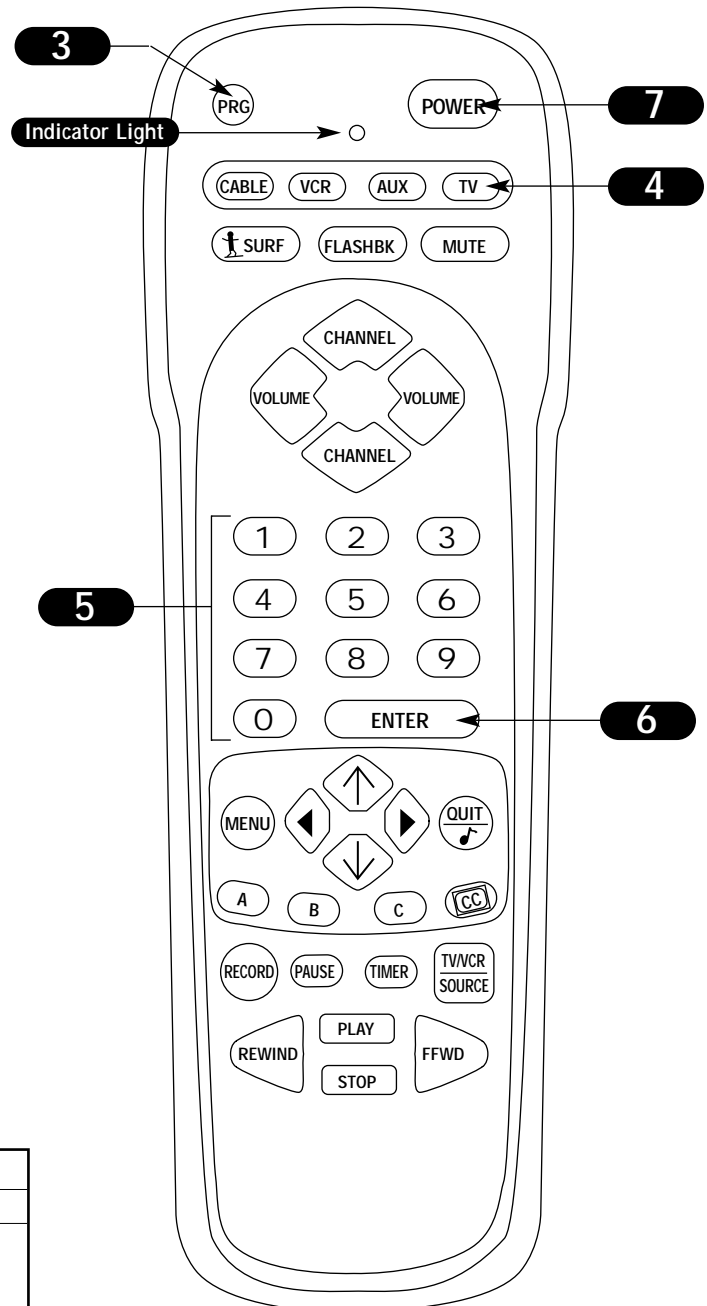
Amplifier Volume Override

Sets up your amplifier to be operated in all remote control modes

1 Find the code that operates your amplifier. Test it to make sure it's the correct one by following the procedure in "Programming Your Remote" on the previous page.

2 Program your audio system into one of the available AUX modes: Aux, Aux+1, Aux+2, or Aux+3.

3 Press and hold PRG on your remote until the indicator light stays lit, then release.

4 Press 4-9-9; then ENTER on the remote. The indicator light will flash three times the code was accepted.

Audio system volume/mute now appears in all modes.
Note: You can also program Cable Box Volume and Mute control (if available) into your cable box mode (CABLE or AUX mode) by repeating the steps for programming on the previous page but entering 3-9-9, instead of a brand code, then pressing ENTER.

☺ *Your volume and mute keys now control your amplifier, while all the other keys still operate the Presentation TV. To put everything back to normal, reprogram all modes with their original codes (see the "Programming Your Remote" page).*

☹ *If you can't find the code for your amplifier, use the Auto Find feature.*

3

PRG   POWER

Indicator Light   ○

2

CABLE   VCR   AUX   TV

SURF   FLASHBK   MUTE

CHANNEL
VOLUME   VOLUME
CHANNEL

1   2   3
4   5   6   **4**
7   8   9
0   ENTER

MENU   ◄ ↑ ►   QUIT♪

A   B   C   CC

RECORD   PAUSE   TIMER   TV/VCR SOURCE

REWIND   PLAY   FFWD
STOP
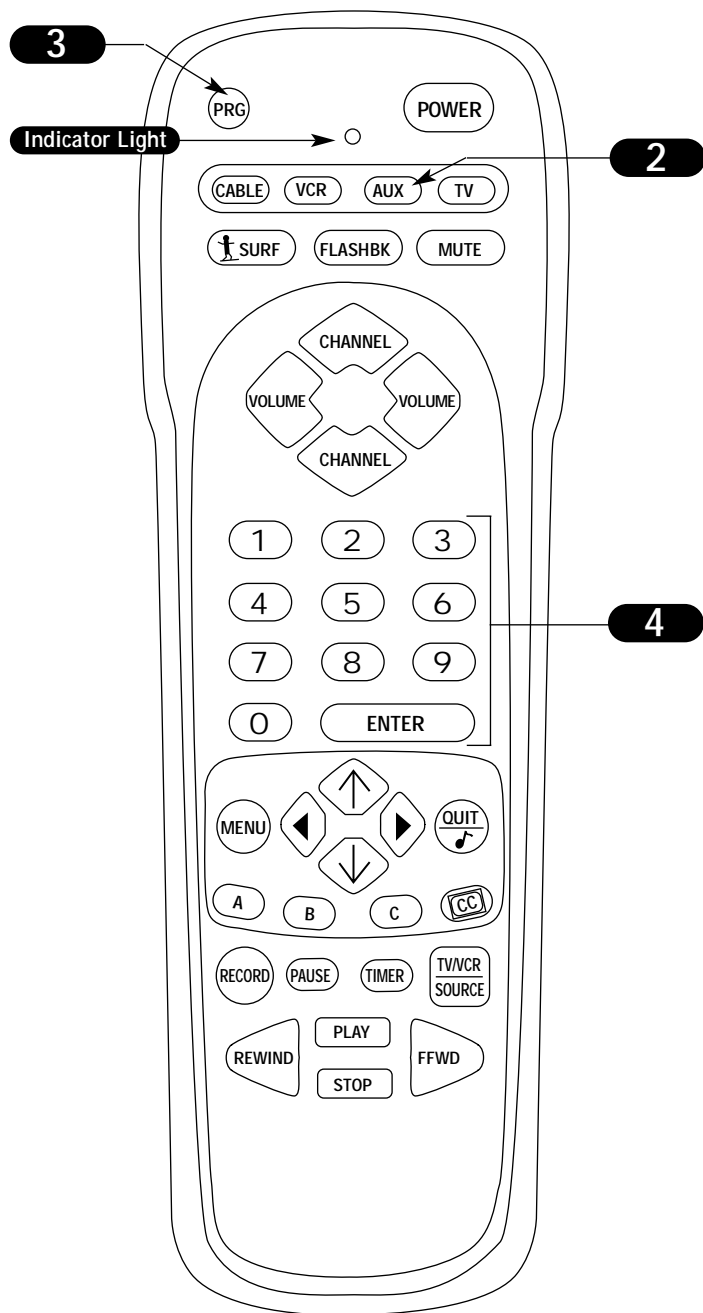
Mini glossary

AMPLIFIER   An electronic device that amplifies sound from a television, CD player, VCR, or other A/V device.

There are 3 additional Aux modes you can program

1 Refer to the brand programming codes on pages 43 - 44 to find the type and brand name of the device you're programming.

2 Press and hold the PRG key until the indicator light turns on.

3 Press the AUX key and the 1 on the NUMBER keypad at the same time (for AUX +1).

4 Using the NUMBER keypad, enter the three-number code for the device you've selected.

5 Press ENTER to save the code.

6 Turn the device on. Point the remote at the device and press POWER. It should turn off.

7 Repeat the steps to program AUX+2, and AUX+3.

Programming your Zenith remote will allow you to use one remote to work up to 7 different devices.

Some devices may not work with the Zenith remote control.
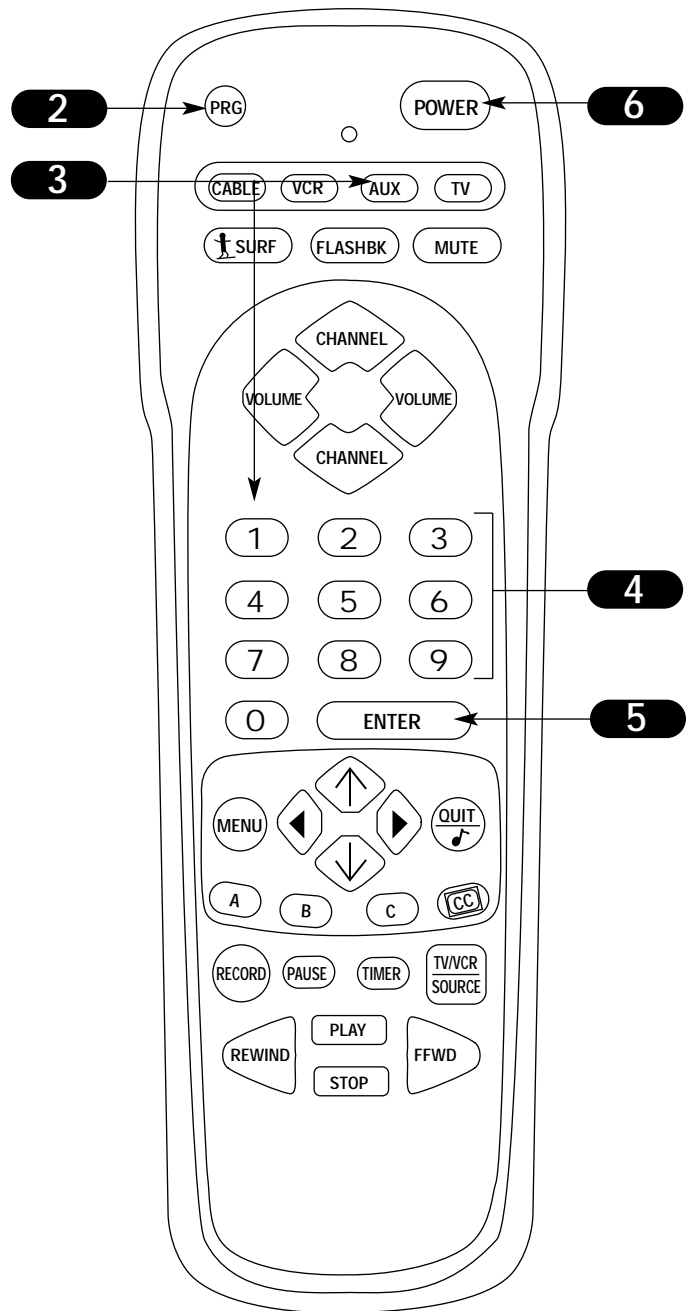
Remote Control Auto-Find

If Programming the Remote did not find your code, try this procedure to automatically find the code for your device. If your remote becomes inoperable, go back to "Programming your Remote" and enter the Zenith TV code for step five

1 Turn on the device you're programming for the remote control.

2 Press and hold the PRG key until the indicator light turns on.

3 Press the key for the device you're trying to program (CABLE, VCR, AUX, TV).

4 Enter the code 0-0-0 (zero-zero-zero), then press the ENTER key right away.

5 Aim the remote at the correct device and press POWER. Allow a second to pass, then push the POWER key again. <u>Repeat until the device turns off.</u> (This is a trial and error process, so it may be necessary to repeat these steps until the remote finds your code.)

6 Push ENTER to save the code.

7 Press POWER to turn the device back on.

☺ *You can quickly get out of Auto Find by pressing QUIT.*

☹ *If the indicator light stays on while you push Power, instead of turning off, all the codes have been tried and the device can't be programmed.*

206-3602-0
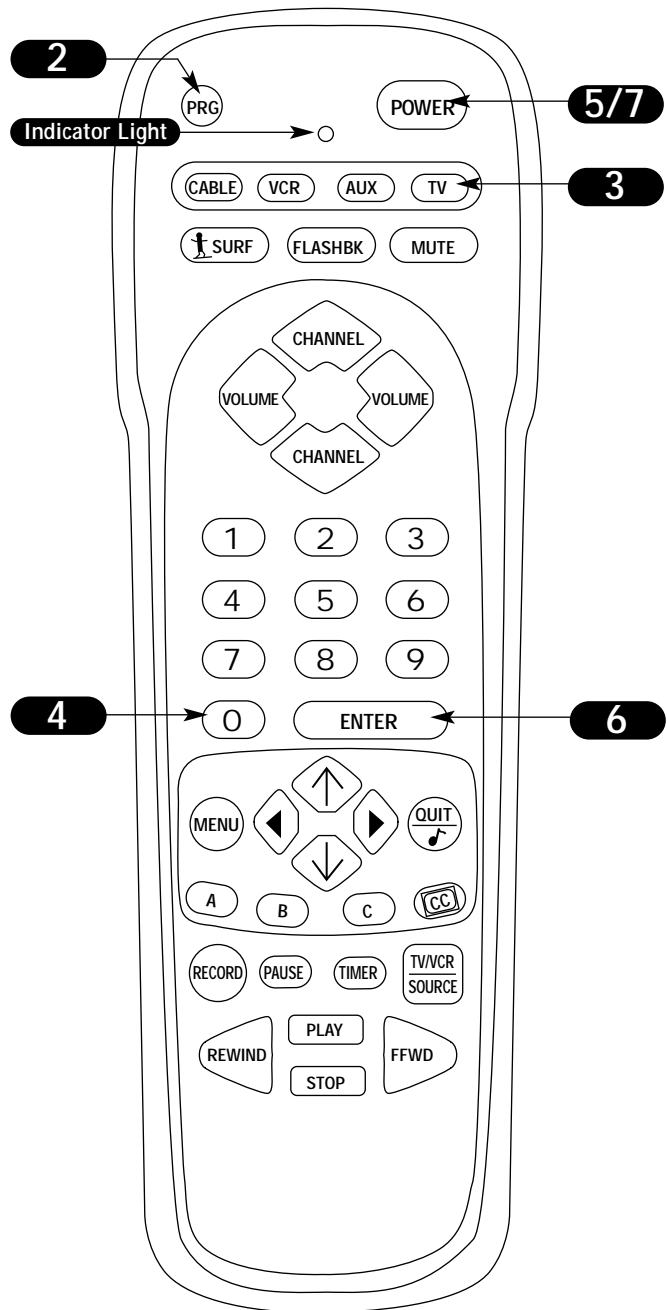
Find the codes you need to program your remote. On this page: TVs, VCRs, and Cable Boxes

TVs

Admiral 121

Bell & Howell 121

Citizen 121

Curtis Mathis 121

Daewoo 149

Elektra 121

Kurazi 121

Lodgent. 121

Logik 121

Majestic 121

Memorex 121

Montgomery Ward . 121

Teknika 121

Telerent. 121

Signature 2000 . . . 121

XR-1000 121

Zenith 101 121 149
152

TV/VCR Combination Codes

Adventura TV/VCR . 154

Daewoo TV/VCR . . 148

Funai TV/VCR. . . . 154

Goldstar TV/VCR . . 153 172

Symphonic TV/VCR 154

Zenith TV/VCR . . . 150 153 154
172

VCRs

Admiral 261

Akai 292 717 718
719 720

Audio Dynamics . . 726

Bell & Howell 247

Broksonic 221 250 255
729

Candle 727

Canon. 704

Capeheart 728

Citizen 727

Craig 212

Curtis Mathes . . . 259 266 725
727

Daewoo 244 246 248
254 703 729

Daytron 246

DBX 726

Electrochrome. . . . 730

Emerson 203 221 243
250 293 721
722 729 730
731 732

Fisher 211 212 213
247 265 274

General Electric . . 216 220 266
282 701 702
725

Go Video 256 262 263
700

Goldstar 253

Harmon Kardon . . . 296

Hitachi 257 270 273
292 705 706
707 708

J.C. Penny 268 726

Jensen 292

JVC 224 225 258
268 292 299
726

Kenwood 268 292 726
727

Magnavox 275

Marantz 267 268 726
727

Memorex 212 298

MGA 297 730

Mitsubishi 276 277 278
279 280 296
297 730

Montgomery Ward 216 219 249
291 730

MultiTech. 727

NEC 267 268 269
281 292 709
726

Orion 250

Panasonic 245 251 259
713 714 715
716

Pentax 708 727

Philco. 275

Pioneer 210 282 726

Portland 246 727

ProScan 216 260 266
282 725

Quasar 259 295

Radio Shack 213 265 730

RCA 216 220 228
240 242 249
260 266 282
283 284 285
286 287 288
708 710 711
725

Realistic 212 213 265
730

Saisho. 722

Salora 297

Samsung 220 230

Sansui 289 292 709
726

Sanyo 212 247 294

Scott 243 290 729

Sears 211 212 213
265 274

Sharp 261 730

Signature 2000 . . . 216 219 249

Sony 232 723 724

Sylvania 275 297

Tatung 268 292

Teac 268

Teknika 272

Toshiba 213 274 290
297

Vector Research . . 726 727

Victor 726

Video Concepts . . . 726 727

XR - 1000 243

Yamaha 726

Zenith 201 224 225
229

Cable Boxes

Allegro 358 362

Allegro A-B Switch 361

Archer 325

Century 325

Citizen 325

Comtronic 326

Garrard 325

Gemini 305 331 338

General Electric. . . 367

General Instrument 304 305 306
307 308 309
310 318

Hamlin 302 303 345

365 366

Jasco 325

Jerrold 304 307 308
309 310 318
360 363

Kale Vision 335

Macom 321

Magnavox 327 334

NSC 335 339 368
369 370

Oak 311 332 342

Panasonic 313 320

Philips 325 327 347
350 352 354

355

Pioneer 315 343

RCA 341

Regency 329

Samsung 326 335

Scientific Atlanta 316 323 336
337 364

Signal 326

SL Marx 326

Sprucer 313

Standard Comp . . . 335

Stargate 326 379

Teleview 326

Texscan 339 356 371

Tocom 317 318 346

Unika 325 348 362

Universal 325 358 362

Vid Tech 340

Video Way 349

Viewstar 327 354 355
372

Zenith HT-2000 . . . 353

Zenith PM 374

Brand Programming Codes

Find the codes you need to program your remote.
On this page: Satellite Receivers, DVD Players, Audio CD Players, Audio Tape Decks, and Audio Tuners/Amplifiers

Satellite Receivers

Alphastar 516	Hughes Network . . 514	RCA 510 517	Toshiba 509 512
Chaparral 501 502	JVC 518	Realistic 506	Uniden 522
Cheyenne 502	Macom 314	Sierra I 502	United 344
Dishnet 515	Magnavox 521	Sierra II 502	Zenith Drake 312 330
Drake 503	Phillips 521	Sierra III 502	Zenith Satellite . . 328 351 378 500
General Electric . . . 510 517	PrimeStar 513	Sony 511	
General Instrument 504 505	ProScan 510 517	STS1 507	
Hitachi 519 520	RCA DSS 373	STS3 508	

DVD Players

JVC 965	Pioneer 963	Toshiba 961
Mitsubushi 964	Sony 962	Zenith 960

Audio CD Players

ADC 940	JVC 949 954	Phillips 421 433 434	Soundesign 461 498 901 902
ADO 939	Kenwood 441 931 948	Pioneer 431 435 944	Sylvania 433
Aiwa 938	Luxman 930	Quasar 432	Teac 418 419
Akai 937	Magnavox 421 422 433 434	Radio Shack 431 441	Technics 432
Denon 935	Marantz 929 947	RCA 437 943	Toshiba 915
Dynatech 953	MCS 928	Sanyo 438 439	Yahama 414 941 942
Emerson 952	Mitsubishi 927	Sears 936	Zenith 460 461 498 901
Fisher 438 933 951	Nakamichi 925 926	Sharp 441 442	902
GE 932	Onkyo 923 924 946	Sherwood 449	
Goldstar 460	Optimus 920 921 922	Sony 420 443 444 445	
Hitachi 950	Panasonic 431 432 945	934	

Audio Tape Decks

Sony 452

Audio Tuners/Amps

Citizen 914	Marantz 903 913	Pioneer 470 485 907	Soundesign 461 498 901 902
GE 916	Memorex 485	Proton 910	Toshiba 915
Goldstar 460 474	Nad 904	Quasar 912	Techniques 912
Hitachi 919	Nakamichi 493	RCA 909	Victor 908
JVC 908	Onkyo 471 906	Sharp 483 917 918	Zenith 460 461 498 901
Kenwood 484	Optimus 905	Sherwood 900	902
Luxman 467	Panasonic 912	Sony 486 489 490 491	
		492	

A list of key functions by mode for the remote control

KEY NAME	TV Mode Zenith Code 101	VCR Mode Zenith Code 201	Cable Mode Zenith Code 353	AUX Mode Zenith Code 960
PRG	Program Mode Codes	Program Mode Codes	Program Mode Codes	Program Mode Codes
POWER	TV On/Off	VCR On/Off	Cable Box On/Off	AUX On/Off
CABLE	Selects Cable	Selects Cable	Selects Cable	Selects Cable
VCR	Selects VCR	Selects VCR	Selects VCR	Selects VCR
AUX	Selects AUX	Selects AUX	Selects AUX	Selects AUX
TV	Selects TV	Selects TV	Selects TV	Selects TV
Surf	Channel Preview	VCR SP/EP	Cable FC/Fav Ch	AUX Audio
FLASHBK	TV Flashback	VCR Flashback	Cable Flashback	AUX Return
MUTE	TV Mute	TV Mute	TV Mute	TV Mute
CHANNEL UP	TV Channel Up	VCR Channel Up	Cable Channel Up	AUX Skip >>
CHANNEL DOWN	TV Channel Down	VCR Channel Down	Cable Channel Down	AUX Skip <<
VOLUME (RIGHT)	TV Volume Up	TV Volume Up	TV Volume Up	TV Volume Up
VOLUME (LEFT)	TV Volume Down	TV Volume Down	TV Volume Down	TV Volume Down
1	TV Digit 1	VCR Digit 1	Cable Digit 1	AUX Digit 1
2	TV Digit 2	VCR Digit 2	Cable Digit 2	AUX Digit 2
3	TV Digit 3	VCR Digit 3	Cable Digit 3	AUX Digit 3
4	TV Digit 4	VCR Digit 4	Cable Digit 4	AUX Digit 4
5	TV Digit 5	VCR Digit 5	Cable Digit 5	AUX Digit 5
6	TV Digit 6	VCR Digit 6	Cable Digit 6	AUX Digit 6
7	TV Digit 7	VCR Digit 7	Cable Digit 7	AUX Digit 7
8	TV Digit 8	VCR Digit 8	Cable Digit 8	AUX Digit 8
9	TV Digit 9	VCR Digit 9	Cable Digit 9	AUX Digit 9
0	TV Digit 0	VCR Digit 0	Cable Digit 0	AUX Digit 0
ENTER	TV Enter	VCR Enter	Cable Enter	AUX Display
MENU	TV Menu	VCR Menu	Cable Menu	AUX Menu
UP ARROW	TV Select Up	VCR Select Up	Cable Up Arrow	AUX Up Arrow
DOWN ARROW	TV Select Down	VCR Select Down	Cable Down Arrow	AUX Down Arrow
LEFT ARROW	TV Adjust Left	VCR Adjust Left	Cable Left Arrow	AUX Title
RIGHT ARROW	TV Adjust Right	VCR Adjust Right	Cable Right Arrow	AUX Sub-Title
QUIT/(Note)	TV Front Sound	VCR Quit	Cable Quit	AUX Resume
A	TV PIP	VCR+	Day Up	AUX Marker
B	TV PIP Swap	VCR Eject Tape	Day Down	AUX Marker Search
C	TV PIP Freeze	VCR Commercial Skip	Cable Page Up	AUX Repeat-Chap
CC	TV Closed Captions	VCR Memory	Cable Page Down	AUX Repeat A-B
TIMER	TV Timer	VCR Timer	Cable Timer	AUX Program
TV/VCR/SOURCE	TV Sources	TV Tuner or VCR Tuner	Cable Info	AUX Open/Close
RECORD	VCR Record	VCR Record	Cable Buy	AUX Angle
PAUSE	VCR Pause	VCR Pause	Cable Guide	AUX Pause
REWIND	VCR Rewind	VCR Rewind	VCR Rewind	AUX Scan <<
PLAY	VCR Play	VCR Play	VCR Play	AUX Play
STOP	VCR Stop	VCR Stop	VCR Stop	AUX Stop/Eject
FFWD	VCR Fast Forward	VCR Fast Forward	VCR Fast Forward	AUX Scan >>

References: MBR3447C, 124-233-04 and µP 221-New

Some of the functions shown above may not be available on your TV (such as PIP).

Use the Installer Menus to change operational settings

Accessing the Installer's Menu

Installer's menus can be accessed by using the installer's remote control. Just press and hold MENU (about 8 seconds) until the display changes, then press 9, 8, 7, 6, then ENTER. To exit the Installer's Menu, press ENTER again. *Any changes you make will be stored in nonvolatile memory.*

The Installer's Menu opens with item 03, POWER MANAGE. Press the SELECT key to sequence through the various items. Or, access an item directly by entering the line number, then pressing MENU. For example, to access the Start Channel option which is on line 11, press 11, then MENU. To change a setting use the Left/Right ADJ keys.

Using the Installer's Menu

Items 00-30 are immediately accessible only upon entering the Installer's Menu. Their numbers, descriptions, ranges, factory default settings, and a place for listing any changes made on-site are given below. A second section of the Installer's Menu that is intended for qualified service technicians only is not shown (items 31-208). Normally these items do not require adjustment.

```
1391-03  1.29                    01




03  POWER MANAGE   0




XX/XX/XX  TE = 10110000
```

⚠ Installer should leave item 00 FACT MENU set to 0 (default). Items 31-208 are service-type adjustments and only qualified technicians having specialized test equipment should access them.

Items in the Installer's Menu:

Item	Description	Range	Fact. Set	Recommended Setting
00	FACT MENU	0 - 1	0	Leave default set 0
01	PRESET PX	0 - 1	1	
02	PRESET AX	0 - 1	1	
03	POWER MANAGE	0 - 7	0	
04	VERT POS	0 - 30	15	
05	HORZ POS	0 - 45	15	
06	BAND/AFC	0 - 7	0	
07	MIN VOLUME	0 - 63	0	
08	MAX VOLUME	0 - 63	63	
09	AC ON	0 - 1	0	
10	KEY DEFEAT	0 - 1	0	
11	STRT CHANNEL	0 - 255	255	
12	STRT VOLUME	0 - 63, 255	255	
13	NOT USED	0 - 1	0	Leave default set 0
14	CHAN LOCK	0 - 1	0	
15	GHOST CH.	0 - 1	0	
16	SCAN MODE	0 - 3	0	Leave default set 0
17	TEXT MODE	0 - 1	1	
18	SLEEP TIMER	0 - 1	1	
19	ALARM	0 - 1	1	
20	CH. OVER RIDE	0 - 1	1	
21	OLD OCV	0 - 1	0	
22	CAPTION LOCK	0 - 1	0	
23	FUNCTION PRE	0 - 1	0	
24	FEATURE LEVEL	0 - 1	1 Zen 1/0 P Lbl	Leave default set 1 (1 Zen 1)
25	NTSC SCAN CARD	0 - 1	0	
26	NOT USED	0 - 1	0	
27	MUTE DISABLE	0 - 1	0	
28	V-CHIP	0 - 1	1	
29	MAX BLOCK HOURS	0 - 99	12	
30	STRT AUX SRCE	(0)/1-5/255	255	

*Note: Installer Menu Items
Changing TV Mode Values Installer menu options: 01 PRESET PX (Preset Picture), 04 VERT POS (Vertical Position), and 05 HORZ POS (Horizontal Position), have separate values for TV mode and Computer mode. If you enter the installer menu with the source being a TV channel, Aux, S-Video, or Camport you change the values for TV mode only.

Changing Computer Mode Values
To change values for Computer mode, press TV/VCR SOURCE to select REAR COMPUTER SVGA or FRONT COMPUTER SVGA as the source, then enter the installer menu. The changes you make will then apply to Computer Mode.

00 FACT MENU (Factory Menu)
Used to access and customize Service Menu settings using the installer type remote.

01 PRESET PX (Preset Picture)*
Saves your custom video settings (color, tint, contrast, and brightness) in nonvolatile memory (not affected by power loss). Memory status is indicated by a 1 for "custom settings already stored," or 0 for "custom settings have not been stored."

Make all custom video settings before you access the Installer's Menu: and PRESET PX. When you use the ADJUST keys to toggle from 0 - 1, any changes in the video settings will be stored sure they are correct! These settings become the PRESET values for the PICTURE PREF option of the Video Menu. (For more information refer to the Video Menu section of this manual.)

02 PRESET AX (Preset Audio)
Saves your custom audio settings in nonvolatile memory (not affected by power loss). Memory status is indicated by a 0 for "custom settings already stored," or 1 for "custom settings have not been stored."

Make all custom audio settings before you access the Installer's Menu and PRESET AX. When you use the ADJUST keys to toggle from 0 - 1, any changes in the audio settings will be stored be sure they are correct! These settings become the PRESET values for the Audio Menu. (For more information refer to the Audio Menu section of this manual.)

03 POWER MANAGE (Power Management)
The POWER MANAGE function is for saving energy. When set to 0, Power Manage is OFF. Settings range from 0 - 7, with 1 - 7 representing the hours that the TV will remain on, unless there has been activity from either the control panel or remote.

04 VERT POS (Vertical Position)*
Moves captions and displays vertically on the screen. Use the Left/Right ADJUST arrows. Typical value is 15. Black bars top and bottom define the active screen area.

05 HORZ POS (Horizontal Position)*
Moves captions and displays horizontally on the screen. Use the ADJUST keys. Typical value is 34. Black bars top and bottom define the active screen area.

06 BAND/AFC (Band/Automatic Frequency Control)
There are 8 possible settings for this option:

0 = Broadcast Fixed	4 = Broadcast AFC
5 = CATV Fixed	1 = CATV AFC
6 = HRC Fixed	2 = HRC AFC
7 = ICC Fixed	3 = ICC AFC

Channels are accessed faster when fixed modes are used. The AFC (search modes) should only be used when some channels are not on nominal frequencies.
NOTE: BAND is automatically set by AUTO PROGRAM.

If some channels were not found by AUTO PROGRAM, select the appropriate AFC setting here and add the channels using the ADD/DEL option in the Setup Menu.

07 MIN VOLUME (Minimum Volume)
This function determines the minimum volume level allowable with the VOLUME (VOL) Up/Down control. In this way, for example, someone cannot set the volume too low to hear. The range is from 0 to 63—change values with ADJUST . The factory default is 0, which provides full range of volume control. It may be best to set the same value on every TV. NOTE: The minimum volume level cannot have a value setting higher than in the MAX VOLUME level (described below).

08 MAX VOLUME (Maximum Volume)
This function determines the maximum volume level allowable with the VOLUME VOL Up/Down control. In this way, for example, someone cannot set the volume level high enough to disturb others. The range is 0 to 63, with 63 as the default which gives the user the full range of volume control. Change values with ADJUST keys. It may be best to set the same value on every TV. NOTE: The maximum volume level cannot have a value setting lower than the MIN VOLUME level (described above).

09 AC ON (AC Power Switchable)
Allows the TV to turn ON just by applying AC power. Pressing the ON button is not necessary. This is desirable when the TV is plugged into a cable box or a power outlet controlled by a wall switch. Use ADJUST to select 0 or 1, where 0 is the default is OFF, and 1 is ON.
NOTE: When set to 1 (ON), the TV does not respond to ON/OFF commands from either the remote or the control panel, and the SLEEP TIMER is also nonfunctional.

10 KEY DEFEAT (Keyboard Defeat)
When set to 1, it prevents the end user from accessing screen menus on the front panel—MENU, SELECT, and ADJUST do not function. When set to 0, those keys are functional. The menus can always be accessed with MENU on the remote.

Continued from previous page.

11 STRT CHANNEL (Start Channel)

When active, this function allows you to determine the initial channel number when the TV is turned ON. This feature is useful for an in-house information channel, since the TV would always select that channel when it is turned on. Setting this to 255 causes the last channel viewed when TV was turned off to be the tuned to channel when the TV is turned on again.

The range of values is 0 - 255. Use (adjust) keys to choose numbers that determine the start channel.

12 STRT VOLUME (Start Volume)

When active, this function allows you to determine the initial volume level setting when the TV is turned ON. This feature is useful for an in-house information channel, since the TV would always select that channel when it is turned on. When inactive, the volume level and channel retain the settings when the set was last used.

The range of values is 0 - 63, 255. Use (adjust) keys to choose: (1) With number 255 the feature is inactive. (2) Set the volume level as desired before exiting the installer menu.

13 NOT USED

14 CHAN LOCK (Channel Lock)

When set to 1 the CHAN LOCK is ideal if a cable box (or similar) is the sole source for programming—and the TV must always be on the same channel. Changing channels with Channel Up/Down or keypad numbers is impossible. Channel Lock is inactive when set to 0 (default).

Generally, this feature is used in connection with START CHANNEL (line 11) where the start channel may, for example, be set to 3 or 4. If the start channel is 3 then the TV will remain on channel 3. NOTE: When channel lock is active AUTO PROGRAM and CH. ADD/DEL in the SETUP MENU are not active.

15 GHOST CH. (Ghost Channel)

When set to 1, the current channel number is displayed in the upper right corner of the CRT. The number moves slightly to prevent damage to the screen. The default is "0" or OFF. NOTE: When captions are on, the "ghost channel" is not displayed.

16 NOT USED

17 TEXT MODE

Determines whether TEXT 1, TEXT 2, TEXT 3, or TEXT 4 decoding is enabled when TEXT is turned on (either from the Setup Menu or directly with CC on the remote). TIP: Set Text Mode to 1 only if text is offered in your video system.

18 SLEEP TIMER

When set to 1, the SLEEP TIMER feature may be used (but no message is displayed prior to turn-off). When set to 0, the sleep timer is not available.

19 ALARM

Gives you the option of making the alarm function available to the user. Set to 1, alarm function is available. Set to 0 to disable this function. (Clock must be set in order to use the alarm.)

20 CH. OVERRIDE (Channel Override)

When set to 1, the user is allowed to select channels with either Channel up/down or by direct keypad entry. When set to 0, only those channels that are entered for scanning may be selected.

21. OLD OCV (On Command Video™)

Set to 1 for operation with systems from On Command Corporation.

22. CAPTION LOCK

Set to 1 to restore previous caption On/Off state after TV turns off when set to 0, captions are always off when TV is initially turned on.

23. FUNCTION PRE

Set to 0 to suppress CHANNEL PREVIEW FUNCTION with some pay per view systems.

24. FEATURE LEVEL

Default set to ZEN 1 for Zenith IR remote control operation. Set 0, P LBL for Zenith Private Label IR remote control operation.

⚠ **Note: Installer should leave item 24 FEATURE LEVEL set to 1 (default).**

25. NTSC SCAN CARD

Default set to 0, Off. Set to 1 to turn On.

26. NOT USED

27 MUTE DISABLE

Enables or disables mute volume capability Default set to 0, On. Set to 1 to turn Off.

28. V-CHIP

Default set to 1, Parental Control active, 0=Parental Control off.

29. MAXIMUM PARENTAL CONTROL BLOCK HOURS

Default hours set to 12, default can be set up to 99 Hours.

30. START AUX SOURCE

Default is 4, Rear SVGA Computer. 0=Camport, 1=Aux. 2=S-Video. 3=Front SVGA Computer. 4=Rear SVGA Computer. 5=Rear NTSC Computer. Use in conjunction with setting for Start Channel. Note: The "Range" value indicated on page 31, of START AUX SOURCE can be set to "0" only if the factory menu item number 29 (AUTO CAMPORT) is set to "0".

⚠ **Items 31-208 are service-type adjustments and only qualified technicians having specialized test equipment should access them.**

Use the Zenith LT2000 QuickSet II "Clone" Programmer to copy the setup from a "master" TV then quickly transfer the setup to duplicate TVs - must be the same model number as the master TV

Learn Master TV
Typical MPI Connections

Teach Other TV
Typical MPI Connections

Clone

Clone

```
THE CLONE HAS CONTROL OF THE TV

THE CLONE IS VERSION        XX
THE TV IS VERSION           XX
THE SW IS REVISION          XX

CLONE CLOCK   = XX:XX
TV    CLOCK   = XX:XX

-PRESS ANY KEY TO CONTINUE.

-DISCONNECT CLONE WHEN DONE.
```
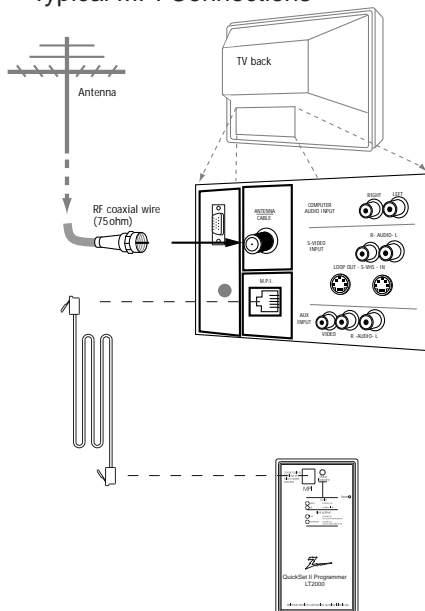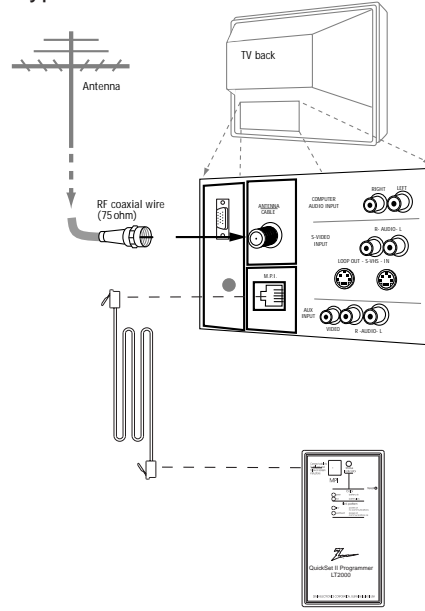
Clone Controlling TV Display

The optional QuickSet II Clone Programmer (LT2000) allows custom setup and programming information to be quickly copied from a master TV into multiple identical television sets. Once learned from the master, setup data is retained in the LT2000 for future use.

When using the LT2000, cloning operations will go easier if the TV set is connected to a good quality signal and operating with a stable picture displayed. To operate the LT2000, use the indicated keys on an HP602, LP702, or MBR3447 remote, or the front panel keys on the TV receiver.

Before you begin…

• The "master TV" should be connected to a good, stable signal from an over-the-air antenna or cable service and turned on.
• Teaching and Learning is only possible between identical model Zenith TVs. (However, the Clone programmer can store 4 different master TV setups.)

⚠ WARNING: Copying a blank or incorrect memory into a TV will cause the TV to operate erratically or become inoperable.

• Use a Zenith MBR Remote like the MBR3447 or the TV front panel controls to operate Learning and Teaching menus.
• Make sure that the batteries in the Clone programmer are fresh.
• If the batteries are removed, the Clone Clock time will be lost.
• Decide if you want to set the time from the Clone programmer or copy the time to the Clone programmer; from a TV which has the clock set to the current time.
• TVs chassis series with the numbers 34, 35, and 50 included in their model numbers (model numbers are on the TV's back) require an additional special procedure to set up Channel Labels. (See next page.)
• Follow the connection diagrams above to connect the Clone to a

master TV and, after learning is complete, to another TV to "teach" it the setup.
• Setting the time and transferring it to the Clone or another TV is a separate procedure.
• Once a TV's setup is copied to another TV, that TV needs to be disconnected from power for about 5 seconds to activate the newly copied setup.
• See Troubleshooting to solve problems.

A. Set Up a Master TV

Using a Zenith Multi-Brand remote like the MBR3447, set up a "Master" TV with custom settings and features as described in the master TV's operating guide. (If the TV Model number includes 34, 35, or 50, do not set up Channel Labels at this time.) The master TV's Setup is what you will copy to the Clone Programmer and transfer to TVs of the same model so they will operate identically.

B. Connect Clone to Master TV

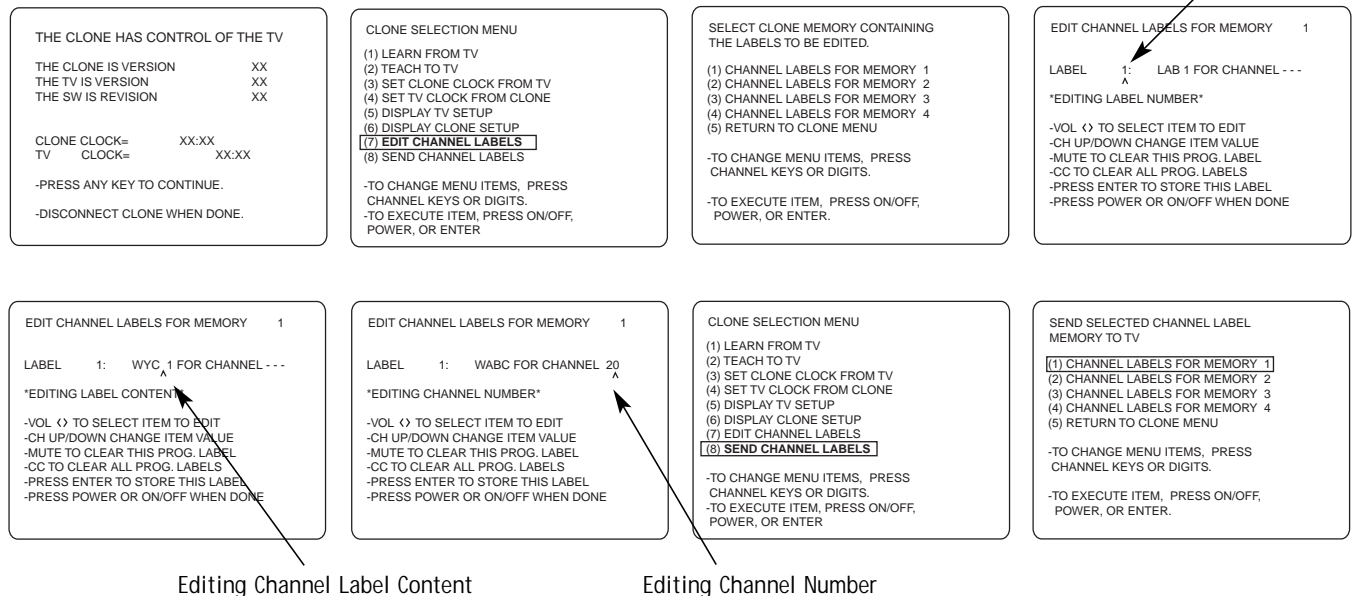If there is a good connection, the "Clone has Control of TV" message will appear. (See menu above.)

☹ *A slow flashing green light indicates there is a problem with the communications between the TV and the programmer. In this case, check for a damaged cable, poor contacts, or other connection troubles.*

☹ *If the status indicator is red, the programmer batteries are low and should be replaced. Use 4 good-quality alkaline AA batteries.*

Typical Edit Channel Labels on-screen menus

Editing Channel Label Number

```
THE CLONE HAS CONTROL OF THE TV

THE CLONE IS VERSION          XX
THE TV IS VERSION             XX
THE SW IS REVISION            XX

CLONE CLOCK=          XX:XX
TV      CLOCK=        XX:XX

-PRESS ANY KEY TO CONTINUE.

-DISCONNECT CLONE WHEN DONE.
```

```
CLONE SELECTION MENU
(1) LEARN FROM TV
(2) TEACH TO TV
(3) SET CLONE CLOCK FROM TV
(4) SET TV CLOCK FROM CLONE
(5) DISPLAY TV SETUP
(6) DISPLAY CLONE SETUP
(7) EDIT CHANNEL LABELS
(8) SEND CHANNEL LABELS

-TO CHANGE MENU ITEMS,  PRESS
 CHANNEL KEYS OR DIGITS.
-TO EXECUTE ITEM, PRESS ON/OFF,
 POWER, OR ENTER
```

```
SELECT CLONE MEMORY CONTAINING
THE LABELS TO BE EDITED.

(1) CHANNEL LABELS FOR MEMORY  1
(2) CHANNEL LABELS FOR MEMORY  2
(3) CHANNEL LABELS FOR MEMORY  3
(4) CHANNEL LABELS FOR MEMORY  4
(5) RETURN TO CLONE MENU

-TO CHANGE MENU ITEMS,  PRESS
 CHANNEL KEYS OR DIGITS.

-TO EXECUTE ITEM,  PRESS ON/OFF,
 POWER, OR ENTER.
```

```
EDIT CHANNEL LABELS FOR MEMORY      1

LABEL     1:    LAB 1 FOR CHANNEL - - -

*EDITING LABEL NUMBER*

-VOL ‹› TO SELECT ITEM TO EDIT
-CH UP/DOWN CHANGE ITEM VALUE
-MUTE TO CLEAR THIS PROG. LABEL
-CC TO CLEAR ALL PROG. LABELS
-PRESS ENTER TO STORE THIS LABEL
-PRESS POWER OR ON/OFF WHEN DONE
```

```
EDIT CHANNEL LABELS FOR MEMORY      1

LABEL     1:    WYC 1 FOR CHANNEL - - -

*EDITING LABEL CONTENT*

-VOL ‹› TO SELECT ITEM TO EDIT
-CH UP/DOWN CHANGE ITEM VALUE
-MUTE TO CLEAR THIS PROG. LABEL
-CC TO CLEAR ALL PROG. LABELS
-PRESS ENTER TO STORE THIS LABEL
-PRESS POWER OR ON/OFF WHEN DONE
```

```
EDIT CHANNEL LABELS FOR MEMORY      1

LABEL     1:    WABC FOR CHANNEL  20

*EDITING CHANNEL NUMBER*

-VOL ‹› TO SELECT ITEM TO EDIT
-CH UP/DOWN CHANGE ITEM VALUE
-MUTE TO CLEAR THIS PROG. LABEL
-CC TO CLEAR ALL PROG. LABELS
-PRESS ENTER TO STORE THIS LABEL
-PRESS POWER OR ON/OFF WHEN DONE
```

```
CLONE SELECTION MENU
(1) LEARN FROM TV
(2) TEACH TO TV
(3) SET CLONE CLOCK FROM TV
(4) SET TV CLOCK FROM CLONE
(5) DISPLAY TV SETUP
(6) DISPLAY CLONE SETUP
(7) EDIT CHANNEL LABELS
(8) SEND CHANNEL LABELS

-TO CHANGE MENU ITEMS,  PRESS
 CHANNEL KEYS OR DIGITS.
-TO EXECUTE ITEM, PRESS ON/OFF,
 POWER, OR ENTER
```

```
SEND SELECTED CHANNEL LABEL
MEMORY TO TV

(1) CHANNEL LABELS FOR MEMORY 1
(2) CHANNEL LABELS FOR MEMORY 2
(3) CHANNEL LABELS FOR MEMORY 3
(4) CHANNEL LABELS FOR MEMORY 4
(5) RETURN TO CLONE MENU

-TO CHANGE MENU ITEMS,  PRESS
 CHANNEL KEYS OR DIGITS.

-TO EXECUTE ITEM,  PRESS ON/OFF,
 POWER, OR ENTER.
```

Editing Channel Label Content   Editing Channel Number

C. Learn Setup from Master TV

Press 1 to select the "Learn From TV" option, then press ON/OFF, POWER, or ENTER to go to the Memory Bank Selection Menu. Pick the Memory "Bank" (1, 2, 3, or 4) you want to store this Master TV's Setup in by pressing either Channel key repeatedly to pick Memory 1, 2, 3, or 4. (If you choose a Memory "Bank" that already has a master TV's setup already in it, it will be overwritten by this Master TV's setup.) Once the Clone memory bank is selected, press ON/OFF, POWER, or ENTER. The Clone memory bank you have selected will be shown. Press ON/OFF or POWER to begin copying the master TV's setup.

Ca. 34, 35, 50 Chassis Series TVs Special Edit Channel Labels Feature

Use the Clone's EDIT CHANNEL LABELS option to create channel labels for the master TV. (It may be helpful to create a list of the available channels and write them down on paper. Alongside the channels numbers, write in your custom labels. See the Edit Channel Labels menus on the previous page. With the Clone Selection Menu on-screen, press 7, then ENTER to go to the Channel Labels Edit Menu. Edit the channel labels by following the on-screen instructions. When finished go back to the Clone Selection Menu and choose (8) SEND CHANNEL LABELS, then press ON/OFF, POWER, or ENTER. Pick the Clone memory bank where the channel labels will be stored. (Should be the same Clone memory bank 1, 2, 3, or 4 where you want to store the same TV setup.)

Cb. Set the Clock (Optional)

Set the time on the Master TV's Clock. (If the time has already been copied from another TV into the Clone programmer, you can

set the Master TV's clock by copying the time from the Clone programmer.) The Clone Programmer can copy the current time to both a master TV and to the Clone's internal clock; accurate to within one minute. (Another reason that the Clone programmer should be equipped with fresh, high-quality alkaline batteries is for it to keep the time as accurately as possible.)
Since the Clone Programmer's time cannot be set directly, the time needs to be copied from a Zenith TV equipped with MPI input capability.

Once the time is copied to the Clone programmer, the current time can then be transferred to another TV. (This can be a Master TV, or another TV which has had the features already set up.)

D. Teach Master TV's Setup to Other TV

Once Learning is complete, remove the MPI cable from the master TV and connect it to the TV that you want to copy the master TV's setup to. With the "TV is Controlled by Clone" message displayed, press 2 or use either Channel key to go to the "Teach to TV" option, press ON/OFF, POWER, or ENTER. Follow on-screen instructions to transfer the Setup and other information to the "Learning" TV. After the "Teach to TV is Complete" message is displayed, press any key to return to the Clone menus option, then press ON/OFF, POWER, or ENTER. If finished, remove MPI cable from the TV.

E. Disconnect TV Power for 5 Seconds

Remove the TV power cord of the newly "Cloned TV" from the power outlet for about 5 seconds to activate the newly copied setup.

Operation Notes

Disconnect the Clone from the TV when you are finished; automatically switching it off. The real-time clock continues to run when the main circuits are switched off.

Reset Clone After Static Shock

After replacing exhausted batteries, or if the programmer behaves strangely after a static shock, use a paper clip or similar instrument inserted through the small hole marked "RESET" to activate the internal reset switch and restore normal operation. After a reset, check the real-time clock setting. It may be necessary to reset the Clone Programmer clock from a TV containing the correct time.

The LT2000 programmer is designed to be used with TVs containing the 221-01006 and later processors. Use with earlier TV sets may give unpredictable results. The specific microprocessor used in any TV set may be determined by activating the Installer Menu. The microprocessor part number appears at the top of the screen when the Installer Menu is activated. Processors before the 221-01006-04 have a limited screen display capability. They can not display entire screens as shown in the quick setup instructions accompanying the LT2000 clone programmer. Use the printed menu illustrations on the quick setup sheet supplied with the Clone as an aid to making your programming choices. (Although the menus are not all displayed, the clone functions all operate normally.)

Troubleshooting

Problem	Possible Cause(s)	Possible Solution(s)
Clone Programmer		
LED does not blink.	• MPI cord not connected.	-Connect MPI cord.
	• TV not turned on.	-TV must be on for clone to work.
	• Weak batteries.	-Install 4 fresh AA high-quality alkaline batteries.
Clone menu hard to read.	• Weak signal.	-Connect TV to a reliable signal source.
No time set.	• No time on Master TV.	-Set time on master TV, copy time to Clone Programmer.
Master and Other TVs		
Cloning did not work.	• Procedure interrupted.	-Wait until procedure complete message is displayed.
	• Different TV models.	-Cloning is only possible with identical model TVs.
Clone time disappeared.	• Batteries were removed.	-Batteries must remain installed to retain time settings.
Channel Labels not present on cloned TV.	• Saved to other memory.	-Must save channel labels to same memory bank as master TV setup.
New Setup not present.	• TV not reset.	-Disconnect newly cloned TV from power for 5 seconds.

When cloning operations are complete, just unplug the LT2000 from the TV.

If the TV does not display a picture (blank screen) after a few seconds, just change channels.

Some quick and easy tips to resolving problems

Symptoms	Cause(s)	Possible Solution(s)	Page(s)
Power			
No Power.	• AC Power Cord not connected or outlet doesn't work,	-Connect power cord. Try a different outlet. -Local power failure?	17 - 21
No Source image.	• Source turned off.	-Turn Source equipment on.	
Remote Control			
Remote doesn't work.	• Remote not in TV mode.	-Press TV to put remote into TV mode.	25
	• TV software functioning.	-Wait until software function is complete.	
	• Not aimed at remote sensor.	-Point remote at TV Front Control Panel.	
	• Remote too far from TV or IR path to TV obstructed.	-Move remote closer to TV or darken room. -Remove obstructions.	
	• Weak batteries.	-Replace batteries.	17 - 21
	• Wrong battery polarity.	-Check that "+" and "-" match in battery compartment.	17 - 21
	• Too much light in room	-Dim room light.	
Menu Operation			
Menu options can't be changed or selected.	• Software lock-up.	-Unplug power cord for 5 minutes to unlock software. (Reset clock if necessary.)	17 - 21
Caption/Text Problems			
Picture has a big black box on it, but the sound is O.K.	• Caption/Text mode turned on.	-The CC (closed caption) option may be in Text 1, 2, 3, or 4 mode. -Select Caption 1, or OFF in the Caption/Text menu.	
No Closed Captions or Text.	• Not available on program.	-Check local TV listings to see if available on broadcast. -Relocate over-the-air antenna. -Try a different channel with Closed Captions or Text.	31
	• Not turned on.	-Pick a Closed Caption or Text option and turn Captions on.	31
Captions appear when sound is muted.	• EZ Mute selected.	-Set Captions option to off.	31
Parental Control Problems			
Protected/blocked message shows on-screen.	• Program content is restricted.	-Key-in password and turn Lock On/Off (restrictions) Off. -Set to Off in Lock On/Off menu.	36/37
	• Don't know password.	-Tune to channel without Parental Control "Content" restrictions. -Wait until restriction time expires.	
TV-PG programs blocked.	• TV-PG set to be blocked.	-Reset restrictions to PG-13 so TV-PG programs will appear.	
Foul language is heard.	• Foul language not blocked.	-Restrict Language in Content options on Parental Control menu.	
	• Program is not rated.	-Restrict programs with no ratings.	

Some quick and easy tips to resolving problems

Symptoms	Possible Cause(s)	Possible Solution(s)	See page(s)
Picture Reception			
Poor or no picture.	• TV station problems.	-Try a different channel.	24/25
	• Video menu not adjusted properly.	-Check Video menu option settings.	35
Local interference.	• Check for disturbing source.	*The following may cause image problems or distortion: Electrical appliances, powerful lights, cars, trucks; computers or portable phones; medical equipment*	
	• Appliance too close to TV.	-If possible increase the distance between your Entertainment Machine and the offending appliance. Or shut one of them off.	
Poor or no color.	• Sub-standard broadcast.	-Try a different channel.	24/25
	• Sub-standard cable signal.	-Notify cable company of reception problem.	
		-If a VCR is connected, play a tape.	
Picture wobbles or drifts.	• CATV not connected, loose.	-Make or tighten connection.	17 - 21
	• Local interference.	-Try different channel. Turn off interfering appliance.	24/25
	• Scrambled CATV channel.	-Tune to unscrambled channel.	24/25
No CATV reception.	• Cable not connected.	-Connect cable to UHF/VHF.	17 - 21
	• Cable service interrupted.	-Contact cable service.	
	• Antenna set, not CATV.	-Select CATV in Setup menu, run Auto Program.	23
Normal picture, poor or no sound.	• Audio Muted.	-Press MUTE or volume right key to increase sound level.	25
	• Broadcast problem.	-Try a different channel.	24/25
	• A/V cables incorrectly connected.	-Install the Audio A/V cables correctly	17 - 21
	• Audio Out cables wrong.	-Install external amplifier cables correctly.	22
	• Speakers turned off.	-Turn speakers on in the Audio menu.	34
	• No 2nd Audio/SAP on program.	-Choose another audio mode option or a different program.	34
Snowy or Poor Picture	• Wrong Ant. connection/location.	-Move antenna, check connection/location.	17 - 21
	• TV/VCR button set wrong.	-Set TV/VCR button on your VCR correctly.	17 - 21
	• Wrong tuning mode.	-Are you in TV or cable tuning mode, and should be in the other?	
	• Wrong output channels selected.	-Set output channels on all A/V equipment to same channel (3 or 4).	
	• Loose connection.	-Check that all connections are tight.	
	• Broadcast problem.	-Try another channel.	24/25
	• Video menu options set wrong.	-Make sure Video menu brightness controls are set properly	35
TV turns On.	• Alarm set to turn TV on.	-Turn TV off.	32
TV turns Off.	• Sleep Timer turned TV Off.	-Turn TV back on.	38

Routine TV cabinet and screen cleaning

Careful and regular cleaning can extend the the useful service life of the TV. Be sure to turn the power off and pull out the power cord before you begin any cleaning.

Screen Cleaning

1. Here's a great way to keep the dust off the screen for a while. Wet a soft cloth in a mixture of lukewarm water and a little fabric softener or dish washing detergent. Wring the cloth until it's almost dry, and then use it to wipe the screen.

2. Make sure the excess water is off the screen, and then let it air-dry before turning it on.

Cabinet Cleaning

1. Use a soft cloth with a mild soap solution to wipe the cabinet. (Avoid using any harsh, industrial strength variety of cleaner.)

2. Rinse the cloth and wipe the cabinet again.

3. Let the cabinet air-dry before turning the Presentation TV on.

Wood Cabinet

Use a quality wood cleaner and polish. This will protect the TV from dirt and dust, as well as keep the cabinet looking new.

Extended Absence

If you leave your TV dormant for a long time (such as a vacation), it's a good idea to unplug the power to protect against possible damage from lightning or power surges. If you use an off-air antenna, you may also want to disconnect it from the back of your TV before leaving.

If you unplug the TV, you may have to reset the clock using the Clock Set menu described earlier. See page 30.

206-3602

A list of definitions for words found in this guide

75 OHM RF CABLE   The wire that comes from an off-air antenna or cable service provider. The end looks like a hex-shaped nut with a wire sticking through the middle. It screws onto the threaded jack on the back of the TV.

300 TO 75 OHM ADAPTER   A small device that connects a two-wire 300 ohm antenna to a 75 ohm RF jack.
They are usually about an inch long with two screws on one end and a round opening with a wire sticking out on the other end.

A/V CABLES   Audio/Video cables. Three cables bunched together—right audio (red), left audio (white), and video (yellow). A/V cables are used for stereo playback of videocassettes and for higher quality picture and sound from other A/V devices.

A/V DEVICE   Any device that produces video or sound (VCR, DVD, cable box, or television).

ADDED   Lets you add new channels to list that you'll scroll through when using your remote.

AMPLIFIER   An electronic device that amplifies sound from a television, CD player, VCR, DVD or other A/V device.

ANTENNA   The physical receiver of television signals sent over the air. A large metal piece of equipment does not always have to be visible for your home to be using an antenna.

AUTO PROGRAM   Auto Program has the Presentation TV automatically find all the channels available in your area.

BLANK   Channels that are Blanked will not have Video (shows a blank screen); only audio, if present on channel.

DELETED   Lets you remove channels from the list that you'll scroll through using the remote.

INPUT   Refers to the jack that receives a signal from a TV, VCR or other A/V device.

JACK   A connection on the back of a TV, VCR, or any other A/V device.

MONO SOUND   Mono (monaural) sound is one channel of sound. On more than one speaker, all the speakers play the same audio.

OUTPUT   Refers to the jack that sends a signal out of a VCR, DVD, or other A/V device.

2ND AUDIO PROGRAMMING/SAP   Second Audio Programming (SAP) is another, separate, audio channel Available with some programming. Choosing SAP often refers to listening to audio in another language, such as Spanish or French.

SIGNAL   Picture and sound traveling through a cable, or over the air, to your television screen.

STEREO SOUND   Stereo (Stereophonic) sound refers to audio that's divided into right and left sides.

TUNER   Device that picks up the signal and turns it into picture and sound.

Your Zenith Presentation™ TV Warranty

Direct-View Color TV   Welcome to the Zenith family! We believe that you will be pleased with your new Presentation™ TV. Please read this warranty carefully, it is a "LIMITED WARRANTY" as defined under Federal Law. This warranty gives you specific legal rights, and you may also have other rights that vary from state-to-state within the U.S.A.

ZENITH'S RESPONSIBILITY

Service Labor   During a period of one year from effective warranty date, Zenith will provide service labor by a Zenith authorized service center when needed, as determined by the Zenith service center, as a result of manufacturing defects.

Parts   New or remanufactured replacements for factory-defective parts will be supplied by a Zenith authorized service center for one year from effective warranty date (color picture tube — two years). Such replacement parts are warranted for the remaining portion of the original warranty period.

On-Site Service   Warranty service for 20" diagonal (U.S.A.) or larger screen size models is provided at the site in most cases. (Some repairs may require the unit to be taken by the servicer to the repair facility and returned, at no additional charge.)

Not Covered   This warranty covers manufacturing defects and does not cover installation, adjustment of customer controls, installation or repair of antenna systems, cable converters or cable company-supplied equipment; it also does not cover damage due to misuse, abuse, negligence, acts of God or other causes beyond the control of Zenith. Any alteration of the product voids this warranty in its entirety.

THIS WARRANTY IS IN LIEU OF ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, INCLUDING WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND ZENITH SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL, INDIRECT, OR INCIDENTAL DAMAGES OF ANY KIND, INCLUDING LOST REVENUES OR PROFITS IN CONNECTION WITH THIS PRODUCT. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS OR THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU.

OWNER'S RESPONSIBILITY

Effective Warranty Date   Warranty begins on the date of the installation of the Commercial Products Direct-View Television Receiver. For your convenience, keep the dealer's dated bill of sale or delivery ticket as evidence of the purchase date.

Operating Guide   Read the Operating Guide carefully so that you will understand the operation of the TV and how to adjust the controls.

Carry-In Service   Models under 20" diagonal (U.S.A.) screen size must be taken to a Zenith authorized service center for warranty service and must be picked up by the owner.

Antenna   Reception problems caused by inadequate antennas or faulty antenna connections are the owner's responsibility.

Important   Product Registration—Please fill out and mail the Product Registration Card. It is imperative that Zenith know how to reach you promptly if we should discover a safety problem that could affect you.

Warranty Service   **For warranty service information, contact any Zenith authorized service center.** Parts and service labor that are Zenith's responsibility (see above) will be provided without charge. Other service is at the owner's expense. If you have any problem in obtaining satisfactory warranty service, call or write the Zenith Response Center. You must provide the model number, serial number and date of purchase or date of original installation. Before you ask for warranty service, read "Maintenance and Troubleshooting" in the operating guide. You might avoid a service call.

ZENITH ELECTRONICS CORPORATION
Zenith Response Center

201 James Record Rd., Building 3,
Huntsville, AL 35824
Telephone (256) 772-1515
Mon-Fri, 7:00 a.m.-8:00 p.m. CST
Sat. 8:00 a.m.-5:00 p.m. CST
www.zenith.com

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801 E. Roosevelt Rd
Lombard, IL 60148
(630) 705-2830

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Additional Zenith Picture Tube Protection Plan Available
Zenith offers you the opportunity to obtain additional long-term protection against failure of the picture tube in your new television. Our Picture Tube Protection Plan enables you to avoid any unexpected picture tube repair expenses and keep your television in top condition. It guarantees you a genuine Zenith replacement picture tube and service from a Zenith authorized service center.

Be sure to send in the Product Registration Card. We will send you an application for the Protection Plan near the expiration of the two-year manufacturer's warranty on the picture tube. For additional information call (256) 774-4088.